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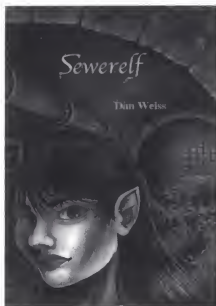
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17 Views of Mount Taranaki

By Peter Friend

Art by Jael

Alice brought our plates, walking across the cafe with all the solemn concentration of a six-year-old. She stayed near our table, staring up at me unselfconsciously. I smiled, and she shyly smiled back, then reached out and touched my face, running her finger-tips along the spirals and ridges.

"Pretty. Much more pretty than before." She giggled, putting her hand over her mouth.

"Alice! What the hell do you think you're doing?"

The little girl fled as her mother approached. "Sorry about that, Jerry. She's just a kid. She doesn't understand ... you know, what's happened and everything."

"It's all right," I said. "I don't mind."

"Not that I understand, either," she continued, not listening to me. "Whole world's gone crazy. Isn't your fault."

Alice peeped out from the kitchen doorway, and I waved at her. She grinned and waved back, then disappeared as she saw her mother returning.

To Alice, I was just someone who'd been given a new face. It was the adults who looked away, as if I were a cripple or an idiot. Even here, where I'd been coming for years, people looked uneasy.

"Eat up," I told Grace.

"Mmmm," she nodded, her mouth full of pavlova.

They didn't have pavlova in America, or so she'd said a week ago. In fact, pavlova was the best thing about New Zealand so far, she'd added grumpily.

"Yummy yummy?" I asked, as she scooped up the last spoonful.

She poked out her tongue at me and licked her broad lips clean. "Don't be cheeky, Sir. I may have to kill you for security reasons," she said, straight-faced. She wasn't quite what I had expected when they said they were giving me a bodyguard. Not that I'd ever had a bodyguard before.

She stood, startling nearby customers with her height. "Where to?" She was already scanning the street outside.

I shrugged. "Just a walk. It's a nice day."

"Just a walk," she echoed, rolling her eyes. "Okay. You're the boss."

Outside, it was worse. Perhaps Grace was right; maybe I shouldn't go out in public until this was all over.

A scruffy teenager in a Guns'n'Roses T-shirt approached and slapped me on the back.

"We'll get 'em, mate, don't you bloody worry," he grinned.

Grace sighed, whispered into her sleeve, and reached inside her jacket.

"The pricks'll pay for this. They'll be sorry," he shouted, following us down the street. "Earth is for humans, that's what I say."

Two of Grace's anonymous dark-suited friends appeared and politely led him away.

"Nuke the bastards! That's the answer, that'll teach 'em!" he yelled.

Grace removed her hand from her jacket, showing a quick flash of bright metal — her gun, probably, but I didn't like to ask.

I avoided meeting anyone's eyes, trying to pretend everything was normal. But most people studiously ignored us anyway.

At a magazine kiosk, my own face gazed back at me from the cover of *Time*. "American Carrier Fleet Rumoured to Arrive Today — UN Debate Continues" was the newspaper headline. The shop assistant stared at me like a frightened rabbit.

"We're attracting attention, Sir." Grace kept her voice low.

I sighed. "All right, let's go."

She whispered into her sleeve again. Thirty seconds later a large car with black-tinted windows pulled up beside us.

"Go," said Grace, as the doors closed behind us. The driver didn't bother asking where.

Mount Taranaki seemed much closer since the aliens had landed. Three weeks ago, it had been a dull hour's bus journey away for me; now the big car devoured the same distance in twenty minutes.

A mile from the aliens were the TV vans and sightseers; people selling souvenir T-shirts and burnt sausages; families sitting on blankets, eating ice creams, and smearing sunblock on whin-children.

Past them all, the army roadblock. The bored soldiers waved us straight through. They'd long since resigned themselves to traffic duty and crowd control. The aliens protected themselves very well — they hadn't killed anyone since the first day.



"Watch yourselves," warned a sergeant as we left the car. "Sniper trouble a couple of hours ago. People are still jumpy."

"Why wasn't I told?" snapped Grace. "So much for international cooperation — how can I maintain Jerry's safety if you people won't even —"

"Relax," he interrupted sourly. "Us dumb kiwis dealt with it, all by our little selves. Without help from the CIA or the Marine Corps." He turned and stomped off, leaving Grace clenching and unclenching her fists.

"Actually, you didn't miss a thing," drawled a familiar voice. "Just another nut with a .303." It was Nancy Roderick, complete with minicam and the same filthy CNN sweatshirt she'd been wearing for the last two weeks. She proudly held out a small flat metal blob.

"See? I ran out and got one of his bullets when it hit their force-field doohickey."

"After filming him first, of course," I suggested.

"Of course," she grinned. "Fascinating man. George someone-or-other, chartered accountant from Rotorua, he said. He was explaining to me how the aliens were demons of the Antichrist, but then the grunts dragged him away — most disappointing. Still, fifteen seconds of classic video journalism. So, if you didn't know about him, why are you out here?"

Grace snorted. "None of your business, parasite."

"I live here, Nancy," I reminded her. "Besides, town's pretty tense, even worse than out here."

"Yeah, the waiting's always the worst part. The natives are getting restless." She laughed raucously at her own wit. "Let me know if anything happens, okay?"

"Sure." I wouldn't say I liked Nancy, but I owed her some favours, especially for that first TV interview. Seventeen people had died when the aliens landed. When I'd walked out, alive but changed, some people were sure I was a traitor, or a spy, or maybe not even human any more. Nancy's interview had made me look like some kind of martyr, even a hero to some people. No one had tried to kill me since.

"Oh, by the way," she called back as she walked away, "that old Maori guy was looking for you. Didn't say why."

We found Hemi down by the force-field, around the other side as usual, away from the crowds. He was sitting on the grass, staring in at his house.

"Kia ora, Hemi."

He looked up glumly.

"Kia ora, toku hoa." Hello, my friend. A few weeks ago, I was just a neighbour — someone to wave to, discuss the weather with, usually no more than that. But everything was different now. Out of all those who had once lived here, we alone survived, for no better reason than that we

had been a hundred metres outside the force-field when it first appeared.

"I been watching them all day," Hemi said. "That one you call Melting Ocean, he been going around and around all the houses. And over by the Atkinsons' tractor shed, and that blue car near the bridge, and the Hapuas' cabbage fields."

"Where all the bodies are," said Grace, and started whispering into her sleeve. Hemi shuddered and hid his face in his hands. I glared at Grace; she had the decency to look embarrassed, perhaps even to blush under her dark skin.

"Oh, yeah. Sorry," she mumbled, and turned away.

Hemi wiped his eyes and looked out towards the aliens again. "Melting Ocean keeps stretching up tall, you know the way they do, and waving that big slab of a head around at us. Like maybe he was looking for you? Well, if not you, who else? Look, there he is again, over by the bridge."

Eight hundred kilos of alien galloped towards us at alarming speed. "Jerry, Jerry, Jerry, Jerry," warbled the translator box on his back.

Behind us, cameras and microphones switched on. At a discreet distance, two surveillance helicopters rose on silenced rotor blades and hovered watchfully. Overhead, no doubt, satellites peered down through the blue sky.

A squad of soldiers jogged around the force-field towards us, grimly determined to protect someone from something. They were followed by a few of the fitter journalists, then a ragged drift of sightseers, children running in front, as if the lions had just come out at the zoo.

Melting Ocean skidded to a clumsy halt in front of us and bent his huge head down level with mine.

"You are Jerry," he informed me proudly, tendrils furiously manipulating the translator's controls. "Good news, good news."

"Uh-huh," I said. His last "good news" had been classifying 329 species of insects, news that hadn't thrilled anyone but himself.

He stooped even lower, angling a row of eyes at Hemi. "You yes are Hemi?"

"Eh? Thought you couldn't recognise any of us?"

"Each day human you are here. Jerry call you Hemi on many times. You yes are Hemi?"

"Yeah, very clever."

"Come. Good news." Without warning, three long clawed limbs lashed out and effortlessly pulled us through the force-field.

The sound of the outside world faded to a muffled hum. Hemi tapped his ears and frowned.

"It's just the force-field," I said. "Grace told me it does something to sound waves — it's driving the military observers crazy."

He shrugged, looked back at the silently gesturing crowd, then up at Melting Ocean. "You got the others to agree, didn't you? To give us back

our dead," he whispered.

"Yes, yes," nodded Melting Ocean cheerfully. "Finished all with them."

"Finished?" shouted Hemi. "What did you do to my *mokopuna*?" He ran towards his house.

Melting Ocean wobbled his head in confusion. "Not hurt them. No pain, they are dead, all. We make wrong again?"

I swallowed and took a deep breath. "Did you take them apart? Like you did to me?"

"Some. Much much to learn, to understand."

"And did you ... put them back together again?"

"Yes, yes. As they are just before all. As I make for you on first day. But without pattern like you."

I winced, mute with remembered agony, and started walking after Hemi.

Melting Ocean waddled after me, peering at me with alternating rows of eyes and wobbling his head. "To gift returning the bodies, a good thing, yes? Soon we are friends, yes?"

"No," I sighed. "It will help a little. I hope. Families out there have been waiting two weeks to hold funerals, to —"

"The death ceremonies, yes," he interrupted, "hiding the bodies deep in the dirt, burning them. To humans, important. You explain to me and I to others all. We climb to understand. Death different for us."

"What do you mean, 'different'? Death is death. If it wasn't for your fancy force-field, those humans out there would kill every one of you. You value your own lives, obviously."

"We must learn. Purpose for life, yes? To add knowledge. We travel here, for three lifetimes. You are only other planet alive we know, all ever. Many many new things to learn, to add knowledge. Death, a bad thing, yes — an ending, no more learning. But knowledge of all is thing more important, more than a life or a death alone."

"More than seventeen human lives, anyway," I said bitterly.

"Accident, accident," he insisted, flailing his limbs and tendrils. "I tell you by many times. On first day, you are unknown, we not —"

"Yeah, I know, I know. You landed and wanted to clear some space, so you just exterminated everything. From bacteria upwards, all 329 species of insects, the grass, the sheep, and those

seventeen two-legged creatures you never even considered might be intelligent life."

"Yes," yes," he agreed sadly. We waded through the dead grass in silence.

"Stay outside," I told him as we approached Hemi's house. "Please."

I followed the sound of weeping, and found Hemi in a bedroom, crouched over his grandson's body. Billy was lying on the bed, arms neatly folded over his chest, dozens of toy dinosaurs arranged in precise rows at his head and feet. Melting Ocean's idea, I assumed — I remembered Billy as a hyperactive eight-year-old who liked to sleep on the floor and knew nothing of tidiness.

"Can I call anyone for you? To tell them?" I asked Hemi.

Silence, then a sigh. "No need. My sister, Katy, she has arranged the *tangi* and burial and everything. She will tell the others," he murmured.

"I'll leave you alone together," I mumbled, and left.

Melting Ocean grabbed me and lifted me onto his back, as if I was just a bulky suitcase. I didn't bother complaining. Tendrils wrapped around my legs, and he started loping towards the Atkinsons' farm.

"Are you going to let all the families in?" I asked him.

"I say yes, but others disagree. Hemi they only allow for he live here. Was. But others from elsewhere, no. I they allow to return bodies, I alone. They say humans are not real people. They say I am wrong to pattern you. You, any of you all, not see our patterns."

"Hardly our fault, is it?" I sighed. "We're too different. Your eyes can't see our colours, not even light and dark. Beyond that we've got no idea how your eyes do work — some sort of 3D radar is the scientists' best guess."

"No, no," he protested. "Your words are true, but not problem. Patterns is problem. You not know your face."

"I understand that you can't recognise us by our faces," I said, trying to stay patient, "so you carved my face so you could tell me apart."

"No, no. Not identify you, identify you ... no, my words slide past." He wobbled his head and tried again. "Under fingers, humans has patterns. Fingerprints, yes? Patterns each different all, identify you, yes, but ... no meaning. Yes?"

"Thanks for explaining," I sighed.

Inside the rusty tractor shed was another



alien, a female, judging by her longer, slimmer limbs and pale colouring. She was crouched over Joe Atkinson, doing something unpleasant to his arm. The two aliens clicked and whistled rapidly at each other.

"He yet not repaired. Almost, very soon," said Melting Ocean to me. "We go to another."

Nearer the farmhouse was another corpse, a farmhand I'd met only once, called Linda as far as I could remember. Next to her sprawled body, two aliens patiently dismantled her tractor. They were most of the way through the engine, and neatly sorted piles of washers, nuts, and bolts lay on the ground.

Melting Ocean picked up Linda in one of his claws, her arms and legs flopping loosely.

"You can't carry bodies around like that," I said. "Put me down a moment."

"Damage not," he protested, but bent down and lowered me to the ground. "Another death ceremony?"

"Sort of. All the humans will be watching. Hold her in your arms, claws, whatever they are, like this," I mimed with my own arms, "and walk with her, don't run."

"Inefficiency," he said. "Only carry two."

"Please, do it my way. Trust me. To us, this will be the most important thing you've done since the first day."

Back inside the tractor shed, the other alien appeared to have finished with Joe's arm. I forced myself to check him, but he looked untouched, unscarred, just like Linda and Billy. Just like me, except my face.

The female alien snatched the translator box from Melting Ocean and leapt in front of me. "What is my pattern, human?" she asked, tapping her head with a claw.

I stared at her. "I don't know."

She made the high-pitched rattling noise which seemed to be their way of laughing. "I am Fast Sky Over Tangling Vines," she sneered, tapping her head again. "You are Seventeen Views Of Mount Taranaki. What is him?" She pointed at Melting Ocean.

"What?"

She rattled again, thumping her claws on the ground. "Animals all," she said to Melting Ocean. "You seek mirage. You bring us shame of delusion." She flung the translator back at him, whirled and punched a jagged hole in the shed's corrugated iron door, then bounded away. The door shivered and rang on its hinges, slowly shaking itself still. Silently, Melting Ocean scooped up Joe.

"Bodies are correct?" he asked.

I moved Joe's left leg slightly and brushed a lock of hair from Linda's face.

"Yes. Let's go."

We walked down to the waiting ambulances and crowds.

Two hours later, we'd carried sixteen bodies out. Each time we reached the force-field, the crowd had grown bigger. More soldiers and police had moved in, but did nothing to stop people throwing the stones and bottles that bounced futilely off the force-field.

"Much anger. I make wrong?"

"No," I sighed, "we're both doing our best. C'mon, we'd better go check on Hemi; he must be still back at his house."

We found him on his front porch, slouched in an old cane chair and talking into a cellular phone.

"That thing works?" I asked incredulously.

He glared at me and put his hand over the mouthpiece. "Course it does. What are you talking about?"

I laughed out loud, to the bewilderment of both human and alien. "Sorry. You have no idea how many military types out there have been guessing how to communicate through the force-field."

Hemi looked at me strangely, murmured into the cellphone for a few moments, then pushed down the aerial.

"Katy's son lent it to me last week. I saw the soldiers already cut all the power and telephone lines."

"You wish me to carry Billy?" asked Melting Ocean.

"What? No, that is for me to do. But not while that bloody circus is out there. I talked to Katy — she has arranged things with the soldiers. After dark, they will bring an ambulance around. After two weeks, I can wait a few more hours."

"I'll stay and wait with you, if that's okay," I said.

"Sure, we have all had a bad day."

"Hemi, you wish to kill me?" asked Melting Ocean.

"What? Hell, you ask some strange questions."

"The humans, many, they shout for my death."

"Yeah, well, that is their opinion. I do my own thinking, thanks. Have you ever heard of *utu*?"

"*Utu*?" repeated Melting Ocean, awkward with the new word.

"Revenge killing, to restore *mana*. No, you do not know what *mana* is either, do you? More deaths, that is what them out there want. Rough justice, payback, eye for an eye and tooth for a tooth, call it what you like — the same thing in any language. But what is the point? Killing you will not bring Billy back, will it?"

"No," agreed Melting Ocean. "Also others, they wish my death."

"Others? The other aliens?"

"They say I am a crime — my words are empty, I cannot prove knowledge. Then I not earn life."

"Shit, so much trouble over a few bloody patterns," Hemi sighed.

"The patterns," I said suddenly, looking up at

Melting Ocean. "I just clicked. What Fast Sky Over ... whatever her name was, said, what you've been telling me. The pattern on your head, it literally means Melting Ocean, doesn't it? And her pattern means her name, and what you carved on my head — Seventeen Views Of Mount Taranaki is your name for me, isn't it?"

"You not know this before?" asked Melting Ocean, wobbling his head.

"Doesn't look like seventeen views of anything to me," said Hemi, staring at the curves and furrows on my face.

"Why seventeen?" I asked, afraid I already knew the answer.

"We see mountain, it is admirable. We land. Seventeen humans die. I inspire to give you pattern. Good pattern is needed, important. I say you are people, all, so I record each in your pattern. To give ... honour?"

"Your patterns — they are all symbols, right?" said Hemi. "A circle somewhere means one thing, a group of lines in another place means something else." He laughed bitterly. "Damned shame your spaceship didn't arrive a bit sooner. Two hundred years ago, you Maori were still covered in *moko*."

Maybe, just maybe, you would have looked at our patterns and we would have looked at your patterns, and no one would have ended up dead."

"*Moko*?" repeated Melting Ocean.

"Tattoos," I said.

"Tattoos!" sneered Hemi good-naturedly. "No, not your sissy little *pakeha* ink tattoos. Hang on a minute, I will show you *moko*."

He disappeared inside the house. Melting Ocean stretched out on the grass, looking like a giant sea anemone trying to eat a giant lobster.

"I been keeping this hidden since Billy came to live with me," said Hemi, returning with a bulky object carefully wrapped in a blanket. "Was going to give it to him when he got older."

He unwrapped a wooden figure covered in elaborate carved lines and spirals. "His father made this in prison. Only good thing the bastard ever did, apart from fathering Billy."

"Patterns. I can see," exclaimed Melting Ocean, pulling himself upright. "It is a human?"

"A *tekoteko*, a carving of an ancestor."

"Are three fingers and toes only." Melting Ocean pointed. "Why?"

"I do not know — there are many theories,

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probably all wrong. I am no expert. Look at the head, that is what I wanted you to see — that is the same pattern the real man had. This is carved in wood, but in the old days we tattooed the same way — chisels into flesh. Must have hurt like hell. When it all healed, it left permanent ridges and furrows in the skin. Sort of like what you did to Jerry.

"The patterns are nothing like the same, of course, they do not mean oceans or views or anything like that. See that spiral there, with the three lines across it? That shows he was an expert storyteller — a highly respected man. The pattern on his cheeks there, under the eyes, that identifies his tribe. Up there is the rank of his father, and on the other side the rank of his mother."

"I must see humans with *moko*," insisted Melting Ocean. "I show others. They then understand, yes? Soon we are friends."

Hemi sighed. "Bad timing again. *Moko* went out of fashion a century ago. One of my great grandfathers had it. I met him once when I was five — boy, was I scared. He died, oh, must be fifty years ago. Some of the young guys get it done these days, but usually with modern ink tattoo — no good to your weird eyes. I have heard of people still doing it the traditional way, but it is very rare.

"But there is plenty of wood carving around, far better stuff than this. The *marae* on the edge of town, where I will take Billy tonight, they have some. And the museum. Up at Auckland museum, I went there once — they have a great collection."

"I borrow wood *moko*? Please?"

Hemi stared at the *tekoteko*, sighed and placed it in one of Melting Ocean's claws. "It is yours. Tell them it is ... a gift of knowledge."

"Gratitude," said Melting Ocean, and galloped away.

"Great," I said. "Now what?"

"Now we sit and watch the sun set. Billy liked sunsets."

Just after eight, an unlit ambulance quietly pulled up at the force-field and took Hemi and Billy away. I was taken to a heavily guarded tent, where a dozen politicians and army officers spent an hour asking me pointless questions. When I left, they were still arguing with one another.

Two hours later Hemi returned, along with two army trucks with blacked-out lights, and took Melting Ocean and three other aliens away.

I was dozing on Grace's shoulder when they returned. She half-carried me to one of the army caravans and put me to bed.

The sound of a loud explosion woke me just before dawn. Outside, there was a lot of shouting, and I could see flames down by the force-field.

"Missile," Nancy shouted cheerfully as she ran past with her camera. "It's Baghdad all over

again."

"Go back to bed," Grace told me. "Whatever happened, there's nothing you can do."

I obeyed.

Nancy was on the TV news while I ate breakfast. The captain and two officers of the *USS Nemesis* had just resigned over their "accidental" firing of a smart missile. Nancy showed the damage — an impact crater nearly three metres deep, and a lot of blackened earth, but inside the force-field not a blade of dead grass had been disturbed.

The rest of the news was interrupted by a frantic hammering on the caravan door. "Jerry! Get your ass out here! They're up to something," came Grace's voice.

Down by the force-field, the crowd was bigger than ever. Thousands had come to see the missile crater, and to throw things at the force-field, but now they watched as all twenty-two aliens solemnly marched towards them. I recognised Melting Ocean, carrying the translator box and Hemi's *tekoteko*. All except four of the others were carrying long hooked metal rods like giant dental instruments.

Grace hauled me up onto the caravan roof so we could see over the crowd. They started to step back nervously as the aliens got closer, relaxing only when the aliens halted about twenty metres from the force-field. A quiet hum of conversation grew behind the clicking of hundreds of cameras.

"Humans," announced Melting Ocean. "You are people."

A few titters, but otherwise baffled silence. Hemi and I were probably the only ones who understood. I looked around but couldn't see him anywhere.

"We are people. We did harm you," Melting Ocean continued.

The crowd rumbled uneasily. A few jeers and shouted obscenities.

"*Utu*," said Melting Ocean. "Eye for eye. Justice."

Seventeen aliens grasped their long metal rods and calmly disemboweled themselves.

People fainted, ran screaming, trampled each other. I saw Nancy lying on the ground, retching, missing a news story for the first time in her life.

The dying aliens shuddered and lay still. Melting Ocean, splattered in grey blood, walked up to the force-field and looked out at us.

"Now we are friends?" he asked. □

DNA Publications

1ST Annual Reader Awards Ballot

All readers are encouraged to vote for DNA Publications reader awards. **VOTING DEADLINE: All votes must be received no later than February 15th!**

CATEGORY DEFINITIONS: To be considered, all works must have been published in English during 2000. Publication or cover date takes precedence over copyright date. Individual stories in a series are eligible only as individual stories. Nothing may be withdrawn from consideration. You may NOT list "No Award" as a nominee in any category, though you do not have to nominate in all categories.

NOVEL: a work over 40,000 words. **NOVELLA:** any work under 40,000 words but over 17,500 words. **NOVELETTE:** any work under 17,500 words but over 7,500 words. **SHORT STORY:** any work under 7,500 words.

PROFESSIONAL ARTIST: one whose work appears on the covers of books, paperbacks or professional magazines.

PRO EDITOR—MAGAZINES: the editor of any serial publication sold on newsstands, in bookstores or by subscription, devoted primarily to SF and/or fantasy stories, with an average circulation over 10,000 copies that pays at least 3¢ per word. *Analog*, *Asimov's*, *F & SF*, *Realms of Fantasy*, and *Science Fiction Chronicle* are professional magazines by this definition; all others are either semi-pro or fanzines.

PRO EDITOR—BOOKS: the editor of a professional line of hardcovers or paperbacks, of an original or reprint anthology series, sold primarily in bookstores and retail outlets during 1998, devoted primarily to SF and/or fantasy.

SEMI-PROZINE: A publication devoted to SF/fantasy which has published at least 4 issues, of which at least 1 appeared during 2000, which meets any TWO of the following criteria: 1) Had an average pressrun of 1,000 or more copies per issue. 2) Paid contributors and/or staff. 3) Provided at least half the annual income of 1 or more persons. 4) At least 15% of its contents, on average, consisted of paid advertising. 5) Declared itself a semiprozine.

FANZINE: Any publication devoted to SF/fantasy or fandom which published at least 4 issues, of which at least 1 appeared during 2000, which meets NONE of the criteria for Semi-Prozine. Editors of fanzines or Semi Prozines are NOT eligible for the Pro Editor—Magazines award.

FAN WRITER, FAN ARTIST: A person whose writing, either fiction or nonfiction, letters, or other written material, or cover or interior artwork first appeared in fanzines or semi-prozines during 2000.

HOW TO VOTE: Winners are established through a weighted voting system. Nominees in 1st place get 3 points; those in 2nd place get 2 points; those in 3rd place get 1 point. Nominees who get the most points win. Make up to 3 nominations in each category, weighted to reflect their importance to you. Voters must sign their ballots, and include their complete names & addresses. Cut out or photocopy this form and return to:

DNA Publications, Inc.

P.O. Box 2988, Radford VA 24143-2988

Mail all ballots to arrive no later than
February 15th.

BEST NOVEL

1 _____
2 _____
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BEST NOVELLA

1 _____
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BEST NOVELETTE

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BEST SHORT STORY

1 _____
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BEST PROFESSIONAL ARTIST

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BEST PRO EDITOR—MAGAZINES

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BEST PRO EDITOR—BOOKS, PAPERBACKS

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BEST SEMI-PROZINE

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BEST FANZINE

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BEST FAN WRITER

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BEST FAN ARTIST

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The following information *must* be completely filled out:

Name _____

Signature _____

Address _____

City _____ State _____ Zip _____

No Job Too Small

By Wil McCarthy

Art by David Le Clerc

Your basic gray goo attack goes something like this: a million million spores blow onto your property, submicroscopic and essentially undetectable. Some die, some remain dormant, but most of them uncyst into simple Von Neumanns and start copying themselves with whatever materials are handy. Grass, buildings ... you know. Sometimes you'll see patches of discoloration before the domestic nanophages trigger and swarm, but more often you never even know about it — a typical assault is over in less than twenty minutes.

When someone's heart is really into vandalism, they'll use a Vonnies powered by something more than Brownian motion. Sunlight, most frequently, but right there you're locked into a conversion mechanism that triples or quadruples the size of the attacker, which of course makes it that much easier for the phages to spot. Call it forty minutes, and usually another twenty to repair the damage when it's over.

Stepping out of misdemeanor territory, we have the "screamer" and "popper" and "Michigan" attacks, whose Vonnies actually carry a chemical fuel supply, ATP or hydrogen-oxygen or sometimes even gasoline, if the fester perp has a little history and a warped sense of humor. Bulldozer, they call that one. By nanoimmunological standards, these Vonnies are gigantic, almost the size of bacteria, but turbocharged as they are, they can really tear through a landscape, damn near impossible to stop. Until the fuel runs out, that is, at which point everything slows down. Submicron manufacturing opens up to crank more fuel, and the Vonnies nail down a surprisingly sophisticated distribution system, but once again they're down to harnessing thermal motion and ambient radiation. The phages take a walk over the system for a while, but often a pocket or two gets fueled up and breaks out again, and the whole cycle starts over. From a distance it looks like white rain, fat droplets of paint splashing and spreading in slow motion and then vanishing into the ground. You stay inside at a time like that, and get comfortable — it can take several hours for the domestic phages to get the upper hand.

Still, there are a lot of sick people in this world. Every now and again, you'll get a Vonnies with a fusion reactor up its ass and nanophage antigens sprouting every which way, and if it sets up shop on your property, it'll take your house

apart in less than a day. You don't mess around with these things — if your domestic immune system ever sounds a Code Red, you get on the phone right away and dial 555-8623. Shelly Quinn, nanosystems removal specialist: I'm the best exterminator in town, and everybody knows it. No job too small.

A routine call, a little after ten, brought me to the scene. Middle-posh neighborhood, an acre lot with trees and gardens, the house set well back from the street. Code Red, so I wore my tall boots and tucked my hair up under my cap. It was a bright, clear morning, filled with the promise of fresh air and interesting work, the sort of morning that reminds me how much I love my job.

I did a visual on the infestation. Highly localized, a finery patch about two meters across. Fractal dimension at least 1.4, which meant the Vonnies were motile and self-reliant but had spread from a single spore, which, for me, was good news. The patch had a gray-white color and a smooth, foamy look to it, as if someone had painted a pinwheel on the lawn with shaving gel. It was spreading with visible speed, though, clearly alive, each little tendrils snaking across the grass like a curious, somewhat slow-witted creature.

I turned the van's engine off, popped all the doors and got out.

The thing about fusion Vonnies is, you can feel the heat pouring off them while they work. It won't, like, melt your flesh off at a distance or anything, but it has been known to start fires, a complication I certainly didn't need. Fortunately, mid-poshies are fanatic about their lawns, keeping them groomed and well-irrigated and altogether flame-retardant, which makes them okay people in my book. Anyway, it was an unseasonably warm January day in a generally unseasonable winter, color rioting across the property in the blooms of confused flowers, spilling from the gardens and trees and making brave forays out onto the lawn, and for me, walking up to this colorless patch of blight was like standing in the warmth of a second sun. If this wasn't a nuke job

I should mention that there's rarely a need to waste time talking to the homeowners directly,



not until the job is finished. The authentication codes are diamond-clad — I can actually get in trouble at this point for not being at the scene, although, why would I? And the family should properly stay clear of the hot zone, for their safety and my convenience. But I could see them peeking out their windows at me, and I waved at them and they waved back, and we traded distant smiles.

Okay, down to business. First thing you do in a case like this is hit the bugs with a shot of disinfectant — it slows a lot of Vonnies down, damages some, and occasionally you'll find you've solved your whole problem right there. Mostly it's just to test the opponent, though, and that's what I had in mind when I pumped up the spray can and hit this patch on wide stream. It sizzled like bacon.

I waited a few seconds, to see if the foam would shrivel or change color or anything. It didn't; okay, no big deal. I put the spray can down, unzipped a pocket, took out a bottle of opaque, black glass. Hunter-killers, solar powered. I dumped them on the infestation to give it something to chew on while I worked. If the domestic immune system had failed against these Vonnies, the HKs were unlikely to do much better, but you know, you do have to start somewhere. Next I took out an empty vial and a sampling pick, both made of clear glass, and I got into a crouch at the edge of the pavement.

This was a time to be careful. I didn't want to accidentally fall over, and if I somehow did, I didn't want it to be into the Vonnies. Some exterminators are cavalier about the risks, strutting around like they'll never make a mistake as long as they live. Which is *literally* true, if you think about it, but thinking about it is not very pleasant. Point is, I was very careful when I set the vial down and scraped a foam sample into it, and even more careful when I got a set of tongs out to close the cap and pick the thing up. Didn't want to get anything on my gloves, much less my fingers.

Immediately, I dropped the vial into a larger jar and sealed it, following the standard procedure. Some folks use a third layer of protection on top of that, but there's no rational justification for doing so, as long as your jars are tough and your equipment up to spec. Remember that, if you're ever foolish enough to call another exterminator: triple-cappers don't trust their own work.

When the outer jar was sealed, I picked it up in my thickly gloved hands and walked it back to the van, whose back gate was sitting open for me. The microscope assembly has a cavity in it, sized and shaped precisely to hold the jar, which I popped inside before closing the cover. The device hummed for a moment, and then the screens came to life, at various magnifications and in var-

ious wavelengths and false-color schemes. Each screen morphed steadily through its library of image enhancement techniques, going fuzzy and then sharp, fractal-spiky and then silky-smooth, the whole display seeming to flow and pulsate in an organic way. This can be disconcerting to neophytes, but in fact each shift of the view provides new details and insights not otherwise apparent, so that on that bright January morning I was able, in just a few seconds, to get a fairly comprehensive look at what I was up against.

I whistled my surprise.

Let me pause for a minute to explain something: your basic fusion Vonnie is about the size of an *E. coli*, and looks, under magnification, like a crab that's somehow swallowed a sea urchin. The fusion core itself is tiny, but the charged particles flying out of it are guided into hundreds of microns-long tubules, where they're electromagnetically decelerated, their kinetic energy turned to heat and used to run the chemical reactions that are the Vonnies' actual metabolism. Of course, neutrons fly out as well, and there's no way a microscopic machine can stop those; they just rip right through like musket balls. It's a hell of a way to live — the bug spends about eighty percent of its time repairing fast neutron damage, and another ten percent doing stuff like integrity checks.

But it's a *fast* little mother, and that remaining ten percent can cause a hell of a lot of trouble. A single fusion Vonnie can replicate itself from environmental materials in as little as eight seconds. The process is quite startling to watch, a little like birth and a little like assembly line manufacturing, and a lot like a backward, speeded-up movie of some improbably busy insect tearing a sibling to pieces.

Aside from the waste heat and the sheer, blinding *speed* of the things, with fusion Vonnies you also have radiation to worry about. Not enough to really hurt you or make you sick right away, but it'll wiggle your genes, give you tumors a few decades down the road. That's why I take a dose of short-term Radex symbionts every morning, and to hell with the cost, because you really just never know what you're going to find on a job.

This day was a case in point. Now that you know what a fusion Vonnie looks like, you'll understand my surprise when I saw that these bugs were a good fifty percent larger than usual and bristling with sensory organs, eyes and feelers and chemoreceptors that would be completely superfluous in a simple Von Neumann self-replicator. The manipulating appendages were oversized as well, and there were seven of them, arranged radially, which gave the whole device a weird not-quite-symmetry that I'd never seen before. They carried huge cysts on their backs, as

well, and given the presence of sensory organs, this was a source of no small concern — a structure like that could contain almost anything. Supercomputers, manufactories, a million million airborne spores.

The samples in my jar scuttled into in apparent agitation, as samples in jars will often do, deprived of sustenance, surrounded by hungry colleagues. Very often, the Vonnies will simply attempt to eat one another, which is a funny thing considering what they'll do with the raw materials thus obtained. But these nasty boys were more sophisticated than that.

I said to myself, wow, Shelly, this is, like, no routine call. Definitely, this was going to be an interesting one. As a precaution, I hit the panic button, notifying the residents of yonder house that they should vacate their property at their earliest convenience, and should not bother with niceties like getting dressed first. The infestation was still spreading, and while at its current pace it wouldn't reach the house for nearly an hour, God alone knew what a Vonnies like this might do in the meantime. God and the Vonnies' creator, I should say.

Almost immediately, the front door opened up, and the house spilled its family out onto the lawn.

I picked up a megaphone. "YOU'RE NOT IN IMMEDIATE DANGER," I called to them, "BUT MY INSURANCE CARRIER WOULD APPRECIATE IT IF YOU WOULD REMOVE TO A SAFE DISTANCE." Like Mars, for example. I glanced at a thermal scan of the yard, verified that the path between stoop and garage was clear. "GO FOR A DRIVE," I suggested. "I SHOULD BE FINISHED HERE IN HALF AN HOUR."

Pure speculation, of course, but then, if I took much longer than that I'd be out of a job pretty soon.

Mommy and Daddy held the kids well up off the ground and had them wave to me again before stuffing them into the car, climbing in themselves, and pulling away. Mommy and Daddy didn't look too happy, for which I blamed them not a bit. The car came to life, pivoted, and rolled forward down the driveway. Mommy cast me a worried, exasperated look as the car turned out onto the street and pattered away. I was not supposed

to inconvenience them.

One less complication for me to worry about. I killed my sample Vonnies with a hard X-ray dose, scanned for signs of life, killed them again just to be sure. The Vonnies lay cracked and motionless on my screens, glass insects struck with the electromagnetic hammer of God.

The next thing you try in a case like this is to drop a Vonnies of your own into the mix,

one that's programmed to die on your command so it doesn't become a problem in its own right.

The hunter-killers, which by the way hadn't done diddly to the infestation, didn't count,

because they just eat without replicating, and die after twenty minutes.

Hardly more than a snack for a Vonnies like this one, but fortunately I'm licensed to release all kinds of nasty things, so long as I do it responsibly. In this particular

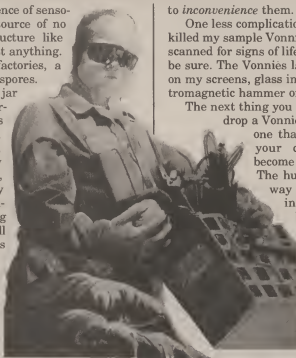
instance, I was inclined to take the broadest possible interpretation of that constraint. I opened my safe, grabbed a handful of foil packets, passive and solar and chemosynthetic Vonnies spores, and I stalked back over to the infestation, now considerably larger than my van and pushing past the front edges of the lawn, tasting the roadside pavement.

I opened the packets and dumped them in the grass at the edges of the gray-white foam. They blossomed, some extravagantly, others with slow, microscopic precision, all with the telltale blue color I always used. I ran back to the van for more packets, did this several times. Within a few minutes I could see interfaces forming, small infestations meeting the large, blue and gray mingling along fractal boundaries of a dimensionality just a hair under two.

There is a certain mathematical beauty about these things, particularly when you know that the really interesting details are reflected in miniature at every scale you might want to observe. In this case, though, the beauty was hard to appreciate, because my boys were quite clearly getting clobbered.

Phooey. Time for the big guns.

Don't tell anyone, okay? But I usually carry a packet of fusion Vonnies, under a false bottom in the van's safe. Illegal, yeah, I know, but sometimes the good guys need to arm themselves like bad guys if they're going to operate effectively. On this day, I dug that one packet out and dumped it on the grass a few feet away from the infestation.



It bloomed with pleasing haste, a blue flower spreading out across the grass at about a millimeter per second. The heat pollution level inched slowly upward.

I don't usually stand idle on a job, but then I don't usually violate the Artificial Life regulations, or face a foe as determined and interesting as this one. Feeling a delightful, decadent sort of guilt, I simply watched as my Vonnie touched a spreading finger of the infestation. The two of them met with a crackling sizzle. Steam rose from the interface.

And then, instantaneously and without any warning whatsoever, the infestation went black. Black as nothingness, black as a moonless, cloudy midnight in the middle of nowhere. The kind of black that hurts the eye, sucking in all the light around it.

And then, just as suddenly, the blackness was interrupted by whiteness, lines of pure, sharp titanium white appearing in the tarry black flower. They formed symbols. Letters, actually. Words. HI, SHELLY! they said. GOJIRO WAS HERE.

My blood turned to iced tea. Gojiro!

That was the name of an old Nipponese movie monster, the kind who went around trampling whole cities just to have something to do. It was also the *nom de guerre* of one of the nastiest and most inventive nanohack festers in the so-called civilized world. His name was all over the trade mags, spoken frequently in jest at exterminators' parties when the night was young, and in earnest when the night was old and the booze had been freed from its bottles.

Gojiro took down this highrise they were building on Key Largo, and ... Gojiro chewed up the White House rose garden, right before the Korean ambassador's visit ... Gojiro threatened to collapse the Tokyo, Honolulu, and Eiffel Towers if the Braves lost the series in '52 ...

As unpredictable as a force of nature and twice as malicious, Gojiro was a man determined to leave his mark on the world, even if that mark was just an ocean of goo where civilization used to be. How did he know my name? For a moment, it just seemed too improbable. Some other fester, someone local, must be using Gojiro's name as a prank, as a way of gaining attention ... But those crisp letters, bright white on deep black, were as good a calling card as any — precious few nanohacks could pull off a stunt like that.

Instantly and without warning, the writing on the infestation changed: ONE SPORE, SHELLY. CAN YOU STOP IT?

Damn! One of the biggest vandals in the world (a) knew my name, (b) had built a highly sophisticated custom Vonnie in my honor, and (c) was taunting me. For an unseasonably warm

Thursday in an unseasonably warm January in a generally unseasonable winter, this was shaping up to be a rather difficult day.

At this point, I looked around and noticed that my blue fusion flower had gone dead black and merged with Gojiro's message board. And the black pool was spreading faster than ever, lining the whole front edge of the lawn and creeping back toward the house, almost a third of the way there. One of the searching tendrils found a tree and began to swarm up it like hot tar that had somehow reversed the law of gravity.

Okay, it was time to do some quick thinking. Sophisticated though it was, the Vonnie made its living banging hydrogen atoms together, or deuterium atoms, a.k.a. "heavy hydrogen," if and when it could find them. Deprive it of that fuel, and ...

The quickest way I could think of to do this was to burn the lawn to a fine ash. Maybe the Vonnies would burn, too, but fusion bugs are built to withstand high temperatures. What about low temperatures? Liquid nitrogen often made life difficult for Vonnies, slowing and sometimes stopping them, occasionally even killing them.

The tree, spangled with bright pink flowers, creaked and fell in a pool of blackness that was already lapping at the trunks of its neighbors.

ARE YOU RUNNING OUT OF TIME? the infestation wondered, in visibly growing letters, as black rivers poured slowly toward the house.

Yes, I was running out of time. Gojiro or no, if I lost the building I would never work in this town again. I hastened back to the van, rummaged for a few seconds, then strapped a UV laser on my back and picked up a thermos jug full of LN . It made sloshing noises as I trotted to the edge of the pavement once more. The infestation was still hanging around indecisively, unsure whether it wanted to cross the pavement or not.

No, wait, that wasn't what it was doing. I looked down with giddy horror and realized it was simply taking its time, *melting and eating the asphalt*. Oh, dear God. I tried hitting it with the UV laser, waving the fibe-op hose back and forth. That made the black foam wiggle and bubble a little, and I thought, okay, I've found something that will hurt it. Not much, though. A lot of Vonnies will curl up and die at the touch of a hundred watts of coherent ultraviolet light, but then again, a lot of them won't. There was never a Vonnie born that could withstand a bath of hard X, of course, but try putting that in a backpack and see how long you last. Radex won't help a bit; it's for particulate radiation only.

Anyway, I could probably kill off the infestation with the UV laser if it were kind enough to sit still for a few hours, but by then the house would be long gone, and probably the neighbors' houses

along with it. I could possibly hold the line, keep it from spreading in the wrong directions, call for backup ... I'd never done that before, called for backup. Nobody I knew ever had. It would mean a loss of face, but then, it was the dreaded Gojiro I was up against

I unscrewed and upended the thermos, dumping the liquid nitrogen on the edge of the black foam. That seemed to have an effect; a big patch turned gray and solid and stopped undulating in that pseudo-organic way. Immediately, I hit it with the laser, to good effect. The gray, frozen goo collapsed to dust where the laser touched it. There, I'd finally killed a patch!

Of course, that was all the liquid nitrogen I had. Maybe, rather than calling for backup, I could simply order up a cryo-tanker and have them hose down the whole yard. I got out my phone and started punching the code for my office AI—

And a human being rose up out of the goo, right there in front of me. Well, not a real human being; I could see that much right away. It was more like a painted marshmallow sculpture of a human, a cartoon turned solid. The proportions were off, too, but in a generally aesthetic way: broad shoulders, strong chin, the eyes huge and soulful, the whole form a sort of caricature of the masculine heroic ideal.

I was so flabbergasted I didn't even think to hit the thing with my laser, didn't think anything at all, except maybe, "Whoa."

And then it started talking.

"Hello, Shelly Quinn," it said, in a bubbly, liquid, cartoon sort of voice. It smiled droopily as it spoke, its clay-puppet lips forming exaggerated syllables. "I am Gojiro. Congratulations on damaging this piece; I rather suspected you would."

The sun was shining right on this thing, and I was just standing there gaping at it, thinking this must somehow be a dream.

"Aren't you going to say anything?" the Play-Doh man asked me.

"What," I said, "you can understand English, too?"

It laughed at that, a sickly bubbling sound. "I assure you, Shelly, the piece is not that good. You're speaking with the real Gojiro on a cellular link. I'm really very pleased to meet you. I'm a great admirer of your work."

"It isn't mutual," I said, which just made the clay man laugh again.

"I want to know if you'd like to go out with me sometime," it said.

I blinked. "I beg your pardon?"

"You know," it prompted, "on a date. Dinner and a movie? It'll be nice."

"I don't think so," I said carefully. "You're, like, the biggest fester vandal in the world, and I hate

you."

"Oh," the clay man said, looking crestfallen. "Would it help if I called off the assault? I can issue a self-destruct signal."

An idea occurred to me. I smiled, and even thought to bat my eyelashes in a generally coquettish manner. "I'll tell you what," I said. "You give me your real name and address, and then self-destruct this thing, and I'll come over to your house as soon as I can."

"With the FBI in tow? I'm smitten, not stupid." The clay man crossed its arms and formed an exaggerated frown. "I figured this would be a clever romantic ploy, but I'm starting to think you don't appreciate it."

It was my turn to laugh. "What was your clue?"

"Look," he said crossly, "I can walk over and disintegrate that house. I can grow a thousand fruiting bodies and blast spores over this entire neighborhood. I can destroy the entire world, if that's my desire."

Our next issue



The next issue of *Aboriginal SF* will feature the following stories "The Last Crow," by Bronwyn Elko, "Deadbeat," by John W. Randall, "Finding Elouisa," by Mary Obropta, "The Long Dizzy Down," by Ziporah Hildebrandt, "A Man's Hands," by Richard Parks, "Carving," by J. F. Peterson, "Shirabe," by Robert J. LaPoint. Plus we will have all of our usual features including our two book review columns, movie previews, and cutting-edge science speculations.

"Get bent," I told him, and hit the clay man with a hundred watts of coherent UV. It shriveled and withered and shrank impressively.

"You'll pay," it managed to bubble before coming apart altogether.

Something crashed behind me, hard and loud and metallic, and I turned to see my van slamming belly-down on the pavement, its wheels suddenly gone. The pavement around it was seething, bubbling, and with sinking horror I realized the infestation had gotten a lot farther than I'd thought, that it had, in fact, eaten a major chunk out of the road and remained in place, somehow imitating the color and texture of the asphalt.

In fact, it was all around me. In fact, I was standing on a tiny island of solid-looking pavement, a little circle barely half a meter across, and all around me was the bubbling blight. That's it, I thought. No more Mr. Nice Girl.

I got on the phone and called for backup. "Notify every unit in town," I told my AI. "Gojiro's paid a visit. I'm taking him out, but I may not be up to the clean and sweep when I'm through."

"That wasn't very smart," the goo around me bubbled. "I could destroy you for that."

The van began to sink into the pavement. My island began, slowly, to shrink.

"I thought I told you to get bent," I said to the goo, and strode resolutely out onto its roiling mass.

As I believe I've mentioned, I wear tall, thick-soled boots when I'm on the job. Well, I could feel those thick soles dissolving under me with every step.

"Stop," the goo said. "What are you doing?"

I got to the van, climbed in. Goo still clung to the bottom of my soles, melting away at them, spreading blackly across the floor of the van. Well, let it. I took up a hammer, turned to my microscope assembly, and smashed it hard, again and again until the cover fell away and the guts were exposed. I grabbed what I needed from there, hauled it out, took up a pair of wire cutters and severed its connections.

Next, I took off the UV laser backpack and began smashing and disassembling it. And when that was complete, I took the scattered pieces and reassembled them in a new way. The contraption was gainfully as hell, but I put it together in about eighty seconds, and I'm still pretty proud of the fact.

By the time I strode out of the van, the floor had begun to dissolve. It was no step down at all. My boot soles were all but gone, and in a few steps I could feel the ooze punch through them and begin disassembling and rearranging the skin of my feet. It's not a painful process, exactly, the damage done on such a tiny scale, but it's cer-

tainly not pleasant.

"Stop," the goo commanded again. "What are you doing? What is that thing?"

"What's left of my X-ray machine," I told it, and flipped the switch.

The UV laser fires a tight, coherent beam, but X-rays are a lot harder to focus. Without proper shielding, they pretty much broadcast in all directions, and a hundred watts' worth is enough to ruin anyone's day if they're anywhere close by.

"NOOOO!" the infestation cried, aware of its peril, the Vonnies that it comprised already beginning to die. With the strength and focus of desperation, it formed a ropy tendril that whipped out to grab me and drag me down.

My feet were half gone by that time, and the X-rays were cooking me sure as a microwave oven, and so pitching sideways into the ooze came almost as a relief, a sure sign that the game was almost over. Which is not to say it was a remotely pleasant experience.

Exterminators are a special breed, and I'm one of the best there is, and I'd always known that a moment like this might come. Laughing in the face of death was, in my opinion, just a normal part of the job, and so I did just that. For about ten seconds, I believe, until my mouth filled up with dying ooze and my vision faded to black.

Died? Yes, absolutely I died. Worst experience I ever had. I got up out of the tele-op coffin and puked all over my office floor. That body cost me *eighty thousand dollars*, and of course, it wasn't insured. Serves me right, yeah, I know.

I found out later that my X-ray machine burned out, about the same time my body did. The hundred-watt power supply was just too much for it, and anyway it was never meant to operate as an independent mechanism. So I didn't quite kill all of Gojiro's goo, but the remnants were weak and disorganized by the time the cavalry arrived.

From there it was short work, just lasers and sweepers and cleaners, and of course the obligatory seeding of the earth with detectors and HKs and antigens tailored for that particular Vonnies. They even managed to salvage some of my stuff from the van, so all in all I guess it was a reasonably happy ending.

That was three weeks ago, though, and I still haven't quite got my operation back together, haven't got all the gear I'd need to fight a major infestation. And I'd *better*, because Gojiro's left two phone messages, making it perfectly clear he's more in love with me than ever, and wants to do something to impress me.

And tomorrow, dear friends, is *Valentine's Day*. □

Nano Nightmares

So let us talk about computers, more specifically, what the people of your world call "personal computers."

It is with some interest that I observe the first tentative steps that your primitive culture is taking to reach the super-science of my own. And, while I am here largely as an observer of your culture, I feel that, if I am properly discreet (and I can think of nothing more discreet than writing editorials for a science fiction magazine), I might help you on your way to enlightenment.

You call your computers "personal," but are they really? Of course, looking at your primitive computing devices side-by-side with the artificial intelligence giants of my world is rather like comparing a banana to an all-woman swing band. But the possibilities are still there.

Last time I visited my home world, we were seeing a new generation of computer approximately every 7.38 minutes. Certainly, as those of you with beepers and cell phones already realize, this new technology brought with it a whole raft of new problems. Not only did the new advanced machines constantly make fun of earlier models created less than a week before, but there were unimaginable new bugs and glitches.

And what can I say about the incredible new viruses? To give you an idea of their advanced nature, suffice it to say that, for a short period of time, one of them dated my sister.

But, problems and all, these new machines were faster, better, sleeker, and half a dozen other superlative descriptive terms, so that my civilization found ways to work with the whole machine. That meant even taking their weaknesses and turning them to our advantage.

But how can we extend our alien experience to your culture? I have discovered through viewing your archived television that you do have some experience with guidance by machine — I believe the proper term is "Danger! Danger! Will Robinson!"

I therefore searched for a practical application using your current technology. Working in a "nearly state of the art" facility like the offices of *Aboriginal Science Fiction*, I was

struck by a relatively recent development which, if properly handled, could have as profound an effect on your culture as similar technology has had upon my own. And, again, it is not so much how your primitive computers work as when they *don't* work that contains the real seed of possibility.

How computers don't work?

I am, of course, referring to what those in your culture call the "blue screen of death," where you are sud-

denly become then!

Imagine how these first small steps of technology have larger implications. You can totally prevent small misunderstandings between members of the staff and between staff members and those with whom they are having what is popularly referred to as "relationships."

You need an example? Say you are faced with a certain problematic query. Specifically, say your immediate supervisor asks:

"How many candy bars would you like to buy for my child's (insert dubiously worthy cause here)?"

Or perhaps your spousal unit utters the following phrase:

"Tell me, does this outfit make me look fat?"

This is where your computer's new, improved blue screen would kick in. Yes, instead of dooming yourself by whatever answer you might have been about to give, you would see on the screen that appears before you a list of options, something like this:

"Warning! This relationship has performed an illegal operation. If you wish to resume control of your life, press control-alt-delete. Press F1 if you wish to reset out of the room; F2 if you wish to reset out of state; F3 if you wish to reset out of this world."

A simple press of a few buttons, and your problem ceases to exist!

Think of the implications. Everyone could hit reset before anything hit fever pitch. War would end. High school kids would have to do without band and football uniforms. Relationships might be shorter, but they would be happier.

Ah, you may object, what about the flip side? Without these everyday conflicts, there would be no competition. No issue would ever come to resolution. Your civilization, stymied at every corner, would have to resort to sending out observers to alien cultures to find anything happening at all!

Oh. Ahem. That last bit was pure speculation. But what more can I say?

"Warning, this column has performed an illegal operation" □



denly informed that your computer has performed "an illegal operation" (thus implying that the law comes from a bunch of — I believe the term is "yahoos" — from Washington state, but I digress). When this screen appears before the operator, the results include raised voices, colorful language, and thrown objects, none of which really advances the machine/operator interface.

Think about it. What if we could learn to stop complaining about the blue screen and personalize it instead!

Yes, in the near future, we will all have immensely smaller computers, able to guide our every action. And how important the blue screen will

Something Old, Something New, and Espresso

By E. H. Wong

Art by Clyde Duensing, III

Leukemia. Nicky Leitner said it out loud in a husky whisper, as if it were something that he wanted no part of in his mouth. Leukemia. It even sounded evil, like a particularly poisonous toadstool, or some Shakespearean crone bent on murder most foul.

A tightness in Nicky's chest made the chill morning air that much harder to breathe. Just yesterday, his older brother Chad had called from Los Angeles with this terrible word. Chad was the one he had always looked up to, the one who had always lent him a helping hand; only this time, it was Chad who needed Nicky's help. Help in the form of Nicky's bone marrow.

How could I have let him down? Nicky felt an urge to cry out, to tear his hair. *What kind of monster am I?*

An overcast sky covered the woods in gloom and stillness like a pall. Autumn pasted brittle foliage on the evergreens and littered lifeless browns on the ground. Nicky booted a pine cone out of his path and watched as it skittered down the hill. He continued hiking uphill on the trail deep in spruce and pine needles.

Over a rise, he encountered the familiar rusted barbed wire fence. A deteriorated metal sign announced, "Government Property. No Trespassing." It had been years since he had hiked the trail that bordered their old family farm. The predawn drive from Seattle had taken over an hour. Nicky yawned and stretched, his body aching from a sleepless night.

He stepped over the sagging fence.

Some minutes later, he rounded a bend and was greeted by the sound of trickling water. Ahead, a pillow cloud of steam hovered. Nicky clambered over some rocks. The hot spring was flowing again! A pool of water steamed below, something he hadn't seen since his late teens. The water collected in a shallow basin, still circled by the ring of boulders he and Chad had rolled into place years before. They had spent countless afternoons soaking in the warm waters until the spring had gone dry.

Nicky tested the water coming out of the rocks with his finger and had to jab it into his mouth to cool. The water was hotter than he had expected. And it tasted different, mildly of minerals, with-

out the faint sulfur smell he remembered. He tested the pool. The temperature felt tolerable, not scalding, more like a steamy hot bath.

The water appeared clean. A few drowned sow bugs floated on the surface, and he skimmed them into the underbrush with his hand. It looked so inviting. *Oh, why not?* he decided, and shucked off his clothes. Naked, he eased himself into the hot water.

He lay down, using one of the boulders as a pillow, the water up to his neck. The vapors smelled faintly of the ocean, and the heat reached into his body to unknot his muscles. He gazed at the treetops and remembered when he and Chad had lain in the pool, talking about everything.

Leukemia. Early forties and Chad was already stricken, the family demon risen again. Josh came to mind, but he pushed the thought away. Nicky swallowed. A bead of sweat rolled down his face. He drifted off.

When he awoke, it took a moment for his head to clear. He stepped onto the rocks to dry before putting on his clothes. As he bent to dress, he noticed several half-inch-long red welts on his legs, and one on his abdomen.

The fever, vomiting, and diarrhea lasted for three days. Nicky went to the clinic late Thursday afternoon. They rushed him immediately to the hospital.

The following morning, Nicky sat up in bed, his bunched-up hospital gown twisted to one side. A bouquet of flowers on his roommate's side perfumed the air, while uneven snores cut through the curtain between their beds.

To Nicky's relief, the nausea was gone. His bandages itched: one on his abdomen and three on his legs.

Dr. Judith Eckel walked in, accompanied by a thin, white-haired man. With an oversized pair of peach designer glasses and blond hair pulled tightly into a bun, her head resembled a smooth, nearsighted egg.

"How's happy hour?" she asked.



"Huh? Oh," Nicky said, once he realized that she was referring to the IV bag. A colorless liquid dripped through a plastic line into the back of his hand. For a second, he pictured the needle underneath the tape on his hand and had to swallow. He tried to concentrate on her words.

"We'll keep you on the IV, to be safe. You lost a lot of fluids. How are you feeling?"

Nicky's head throbbed, and his face felt hot. If he turned his head too fast, the room didn't keep up. "A little warm," he said. "Still woozy."

"Able to keep anything down?"

Nicky glanced at his untouched breakfast tray of toast, oatmeal, and apple juice. "I'm okay now. I don't feel like throwing up anymore. I don't normally eat breakfast. I just have an espresso."

"The Seattle mutagenic diet." She sighed and shook her head. "Even if you've stopped vomiting, let's stay away from coffee until tomorrow. In the meantime, I want you to meet Raul. Raul is a retired paleontologist. He wants to ask about your hot springs."

Nicky's hand was callused, and his shake was firm, reminding Nicky of his father's grip. He wore a white dress shirt open at the collar, and his silky white hair was neatly combed.

"After Dr. Eckel cleaned your wounds, she sent a sample to the pathology lab where my niece works. She called me immediately." Raul spoke in a soft, refined voice with the hint of a Latin accent. He handed Nicky a clear plastic vial filled with what looked like water. A small object floated in the liquid.

Nicky examined the vial and said, "A sow bug?"

Raul chuckled and said, "I suppose it does look like one. No. What you have here is something impossible. You're holding a trilobite."

"Trilobite? You mean like dinosaurs and prehistoric times?"

"Well, sort of. Trilobites predated the dinosaurs by 300 million years. They're supposed to be extinct. Except Dr. Eckel dug this specimen out of you."

Nicky squinted for a better look. The small segmented body did resemble a sow bug, but a closer look revealed chisel-pointed sides on each segmented plate, as well as a separate, distinct head. "So I have a trilobite infection?"

Dr. Eckel said, "We're not sure why you have a fever. The tests aren't back. And antibiotics haven't made a dent."

Nicky said, "How long am I going to be here? My brother has leukemia and I ... I'm supposed to go see him."

Dr. Eckel shook her head. "Cancer patients can't be exposed to infections. Until this clears up, you shouldn't visit him."

Nicky frowned. "What about a marrow trans-

plant?"

"It'd probably kill him."

Nicky sat back. He hadn't expected this, an actual excuse. One part of him felt relieved, but he quickly squashed it. That wasn't right. He said, "Why did they bite me?"

Raul took the vial back and held it up to the light. "I'm not sure that they did. Some varieties of trilobites burrowed, and maybe that's what they were doing. I doubt if trilobites had ever encountered mammalian flesh before. This particular specimen isn't one that we've previously catalogued, but the fossil record is by no means complete."

Dr. Eckel excused herself and left while Raul dragged the visitor's chair over to Nicky's bedside.

Raul said, "If it's not too much trouble, I'd like to know about your hot springs. Especially how to get there."

After Raul left, the day passed slowly. Television held no interest for Nicky, and his technical textbooks made his headache worse. At least his project manager had assured him by phone that there would be no pressure for him to return to work until he fully recovered.

Every few hours, a nurse took his temperature. His high fever hadn't abated. He knew he had to call Chad. Just after 8 pm, he dialed the phone.

"Chad, it's Nicky. You doing okay?"

"I'm all right," Chad said. Nicky imagined he sounded distant, cool.

"You sure?"

"Wait a sec," Chad said. He cleared his throat. "Sorry. The chemo makes me nauseated. My mouth is always so dry. Plus I look like a hairless ghost. You'll see when you come down. You are coming, right?"

"Uh, that's kind of why I'm calling."

Chad didn't respond.

Nicky tensed but forged ahead. "I'm calling you from my hospital room."

"What? What's wrong?"

"I picked up a disease. Fever, vomiting, that kind of thing. They're keeping me here as a precaution."

"Sounds serious."

"I'm okay," Nicky said hesitantly, "There's just one complication. The doctor says I can't see you until my infection clears up. Something about being a danger to you."

"Yeah, I know. I'm immunosuppressed. So how long before you're over this thing?"

"I'm not sure."

Chad said, "You know time is short, right? I'm asking you again. Can you do a marrow transplant for me?"

"Why the rush?"

"It's an accelerated form of leukemia. Super-leukemia they call it. It's chewing me up. Time is really important. So what about the transplant?"

Nicky said, "I'm stuck here. Even antibiotics aren't working. My doctor said a marrow transplant now would probably kill you."

After a pause, Chad said quietly, "You still don't want to do it, do you?"

"It's a moot point."

"What about when you recover?"

"Then ... well, I..."

Both of them fell silent. Chad finally spoke, but so quietly that Nicky had to press the receiver into his ear. "Just so that you know, next Tuesday is — if you'll pardon the expression — the drop dead date. That's only a few days away. I already told my doctors we had typed the same back when Josh got sick. They said we'd absolutely have to start by Tuesday."

Nicky could barely get his words out. "Tuesday. I understand."

After hanging up, Nicky slumped into his pillow. Would Chad's final thought be that his little brother had let him die?

That night, Nicky couldn't sleep. He donned his robe and slippers and headed for the patient/family lounge, rolling his IV pole quietly along. The corridor lights were dimmed. At the end of the hall, the brightly-lit nurses' station was unmanned. Quiet voices came from several of the rooms he passed. The lounge was L-shaped and furnished with green tweed sofas. A single figure sat in the lounge. It was Arthur, the cancer patient he had met the previous night. They had shared laughs into the wee hours.

The face of the stricken CPA looked as if it were meant for a larger person; Arthur's cheeks hung loosely, his pale skin sickly. A nasal prong supplied Arthur with oxygen from a portable tank. With his patchy gray hair, Arthur resembled a worn-out mop that had lost most of its strings. When they had shaken hands the previous evening, Nicky had felt the boiled spinach weakness of his grip.

As soon as he spotted Nicky, Arthur glanced back furtively and said in a Russian accent, "Boris, darling. Did you find moose?" He laughed, his eyes shining brightly. "Couldn't sleep?"

Nicky said, "The coffee generation never sleeps!"

"How are you doing?"

"Still sick."

"Have they figured out what you have?"

Nicky did a Travolta disco move and said, "Sow bug fever." Arthur gave Nicky a strange look, and it was Nicky's turn to laugh. Nicky explained about the trilobites.

"That would really get under my skin,"

Arthur said.

Nicky turned serious. "I found out today that a cancer patient like you shouldn't be exposed to infectious people. I need to keep my distance. And we shouldn't have shaken hands yesterday."

"Nonsense! What harm could a handshake possibly do? Anyway, I've got super lung cancer. It's terminal. They think I have a week. I can only die once. What brought that up, anyway?"

"My brother in L.A.," Nicky said. "He asked me to fly down for a bone marrow transplant. But my doctor says I can't because I'm sick."

"Leukemia?"

Nicky nodded.

"Sorry to hear it." Arthur shook his head and began coughing, a prolonged bout, as if he were a weak lawnmower in need of a tune-up.

"You okay?"

Arthur nodded when he was able and caught his breath. "What's a cough or two when I can have this?" He waved at their surroundings. "The life of Riley. Eat and sleep, all day long. And all the chemo you want. Who said cigarettes can't lead to the good life?"

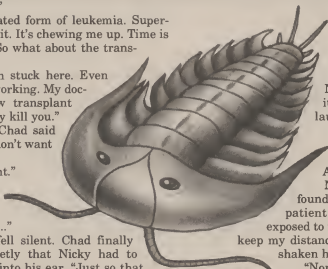
Nicky said, "Where are the nurses? This is the second night in a row that no one's been around."

"You ought to be glad. If they found us here, they'd chase us back to our rooms. The hospital is tremendously overloaded. That's why I'm on the general medical floor, not the cancer ward. The place is packed." He smiled at Nicky and said, "In a way, it was a lucky break for me. Who wants to hang around a bunch of dying people?"

Nicky smiled back. "Not me."

The next afternoon, Nicky's body itched everywhere, as if he'd been overrun by electrified ants. Heat seeped out of every pore. He alternately sweated and shivered.

Jenna, his shift nurse, came to change the dressing on his abdomen. Wearing latex gloves, she peeled back the bandage, gasped, reattached the tape, and said, "Be right back." She hurried out.



Nicky frowned. He studied the bandage but could see nothing unusual. He shifted his body. The tape appeared loose. Maybe he could peek underneath. Just then, Jenna returned with Dr. Eckel. She also pulled on a pair of gloves.

Jenna removed the bandage and said, "See?"

Dr. Eckel probed at the wound, pulling at the skin. She asked Jenna to remove the other bandages. As Dr. Eckel moved over to examine his leg, Nicky could see the abdomen wound. His skin was reflecting light from the fluorescent in the ceiling! A silver oval area the size of a quarter had spread outward from the incision. The cut itself looked almost metallic. As Jenna removed each bandage, he could see that the other incisions were identical.

"That's odd," Dr. Eckel said. She prodded the first incision with a gloved finger. "How does that feel?"

"A little sore. What's going on? Why do they look like this?"

"I don't know." Dr. Eckel frowned and stepped outside. She returned with a scalpel and took samples, several by scraping, one by slicing a thin sliver of the silvery skin. She asked Jenna to dress his wounds. "Have you ever had any skin problems?"

"They took a small melanoma off my nose last year. Does that count?"

Dr. Eckel examined his nose and said, "Melanoma? You're sure it was cancerous?"

"Positive."

"Any recurrences since then?"

"No."

She took a sample from his nose also. "We'll send these to the lab. Your temperature's still abnormally high at 104.4°, but at least it's stable. Do you feel different?"

"Just itching and hot. And my turning into Aluminum Foil Man."

Dr. Eckel smiled and said, "Don't worry. We'll get to the bottom of this."

About fifteen minutes later, Jenna reentered, accompanied by an orderly with a wheelchair. Both pulled on gloves. "We're going to move you to a different section of the hospital," she said. "Are all your belongings in this overnighter?"

The orderly, a young crewcut Hispanic, did something to the bed, and it dropped a few inches. He helped Nicky into the wheelchair.

"Why are you moving me?" Nicky said.

"The nurse epidemiologist changed your room assignment," Jenna said. "Good luck, Nicky."

She placed Nicky's bag onto his lap while the orderly attached the IV pole to the wheelchair. He wheeled Nicky out of the room. Arthur's room was several doors down. As they rolled past, Nicky could see Arthur lying in bed, reading. Loudly, he said, "Arthur!" and waved.

Arthur jerked his head up and spotted Nicky. He waved back. The orderly slowed a moment.

"Going for a test drive?" Arthur said.

"It was good meeting you."

"Same here. Take care."

They went up an elevator, onto a different floor, and down a long corridor. After a while, Nicky turned backwards and asked, "Where are we going?"

"Iso. You're going to Iso, Man." The orderly pointed ahead at a large sign posted over a swinging double door. The sign announced, "ISOLATION WARD."

The new room resembled his old room, except for an entrance airlock, and the fact that Nicky no longer had a roommate. In the airlock, several gowns hung from hooks next to a wash basin. Air rushed into the new room whenever one of the airlock doors was opened. The view from the window showed the Seattle skyline, the Space Needle jutting up behind tall buildings. Instead of a trash can, a large pink plastic bag marked "Infectious Waste" hung from a suspended ring.

A new nurse came in, wearing gloves and a gown. She came to take blood. Nicky gritted his teeth and looked away before she inserted the needle in his arm.

Some time later, Dr. Eckel entered, carrying his folder in one hand and a covered Styrofoam cup in the other. "Like your new digs?"

"Why am I here?"

She pushed a tray table over to his bed and presented him with the cup. "Here's an espresso for you when we're done. On me. Your stomach should be able to take it now. Black okay?"

"Uh, thanks. Black is perfect. But you didn't answer my question."

"Let's see how we're doing, first." She peeled back his bandages and inspected his wounds. The silvery areas seemed larger in size. She made some notations in his chart, which now had a bright red "ISO" label on the tab. She said, "You weren't assigned to the infectious disease ward at first because we've been so short of beds. But since we're dealing with something unknown, you get your own room. Lucky we had one, considering all the cancer patients." Her test results should be back in the morning. I've also asked the Centers for Disease Control for some help. So try not to worry."

The infectious disease ward and an unknown bug? Obviously something was horribly wrong or he wouldn't have been moved to Isolation. A clammy sweat covered his neck. Nicky pried open the lid on the espresso and inhaled the coffee aroma, grateful for the distraction.

"Starbucks?"

Dr. Eckel shook her head. "No. The coffee cart on the corner. Is it okay?"

"It's great. Thanks again. Listen, I want to ask you what you meant yesterday. About espresso."

"Being mutagenic?"

"Yeah."

"Okay. Do you know what mutagens are?"

"They cause cancer, right?"

"Well, sort of, but not exactly. You're thinking about carcinogens — the agents that trigger cancer. Mutagens damage the DNA in cells. Usually, mutagen damage eventually leads to cancer. So for the most part, you're right. Surprisingly, if you use the Ames test, you'll find that a lot of our foods contain mutagens."

"You mean espresso?"

"Yes, and mustard and mushrooms and celery, and a long list of other things. Bacon. Charcoal grilled meats." Nicky looked suspiciously at his cup, and Dr. Eckel laughed. "Stop worrying. The biochemistry of food is a lot more complex than that. Just eat in moderation."

"You sound like a doctor."

She winked. "Practice makes perfect." She tucked his folder under her arm and said, "Anything else for now?"

"My brother wants to know how long this infection will last."

She shrugged. "Good question. Let's get those test results first."

After she left, he considered calling Chad to give him an update. But Chad would say to forget the danger and just come, and then what would he do? He should call anyway. But he couldn't, not yet. And even Chad said they had until Tuesday.

Someone knocked. The inner airlock door opened a crack, and Raul poked his head inside. "May I enter?"

Nicky smiled. "Come in."

The door hissed closed, and Raul pulled up a seat. He was wearing one of the gowns from the airlock. "We found your pool."

"And?"

"Complete with live trilobites, several species, actually. I brought in a sample of the water and some trilobites for Dr. Eckel. How are you doing?"

Nicky told him about his shiny wounds.

"I hope the samples help, then," Raul said.

"Thanks. I appreciate it. Have you discovered the source of the trilobites yet?"

Raul's eyes gleamed. "We're out there right now working on it. My colleagues are all retired like me. People put out to pasture have a lot of time on their hands, you know. Things are still sane, but once the press hears, it's going to be a zoo. We may need security."

"I can imagine."

"I brought you a present." He handed Nicky a large paperback book.

Nicky frowned. "*The Basics of Paleontology*,"

he read.

Raul laughed. "It's not as bad as it sounds. It's an introductory textbook. I thought you might want to bone up on the field you're about to contribute to."

Nicky thumbed through the book, filled with diagrams and photographs of fossils. He examined a drawing of various trilobites.

Raul said, "Everyone has been trying to imagine how a piece of the Cambrian Period could be brought intact into the twentieth century. Want to hear some of the theories?"

"Sure."

"Okay. The first involves a pocket of the Cambrian ocean trapped where two of the Earth's tectonic plates meet. Somehow, this pocket is dragged under the Earth's mantle in a subduction zone." Raul held his two hands flat and slid one beneath the other. "This huge body of water, complete with trilobites, survived and is now feeding the hot springs." After a moment, he laughed and shook his head.

"You don't think so?" Nicky said.

"Subduction zones are too hot. And the Cambrian continental margin would have been too far to the east anyway. Plus you need sunlight to maintain life." He thought for a moment, and added, "Well, not always."

"So what else is there?"

Raul grinned. He was obviously warming to the task. "Another theory suggests that earliest evolution started over again. These trilobites actually evolved from simpler life forms, repeating what happened millions of years ago."

"Is that possible?"

"I don't know. Sounds farfetched, but nothing is impossible."

Nicky nodded.

Raul said, "Or they could've been in that pool of water all along. Or more probably in the source of the spring, all these millions of years, safe from predators. And then there's the possibility of suspended animation. Trilobites frozen in a glacier over 500 million years old."

"What do you think?"

"Me? I'm not sure yet. We're analyzing the water now. Plus looking at trilobite DNA. We'll find some clues." Raul brightened. "Oh, there's also the idea that perhaps trilobites originally came from space. And that another chunk of frozen trilobites just happened to fall to Earth again." Raul laughed. "Crazy or what?"

"Sounds like you're having a good time."

"We are. Retired geologists and paleontologists, dreaming like kids again." Raul rose to leave. "I need to get back. But I hope you get better."

Nicky said, "Thanks, and thanks for the book."

Raul stopped in the open doorway and said,

"No, I'm the one who needs to thank you. I'm sorry that you came down sick. But my cronies and I are also ecstatic over your discovery. It's a wondrous gift."

After Raul departed, Nicky thumbed through the book. He found a chapter on evolution. Evolution occurred at two speeds: slow small changes, and quick large changes. One theory for the two different rates was that after each of the mass extinctions that occurred throughout history, many viable niches became available, leading to the easy survival of a large number of species that could fill those niches. Evolutionary change during these times appeared faster than normal because of the high success rate of new species.

Nicky put the book down and contemplated the trilobites dying off, becoming extinct. Except for the ones in his pool, that is. Of course, maybe they didn't simply die off, but instead mutated to something new. Maybe they discovered espresso.

The rest of Saturday passed, filled with tests but no results. It was now late morning Sunday. He couldn't wait any longer. He steeled himself and picked up the phone.

Nicky dialed Chad's number but only reached his answering machine. He left a message that he was still sick, but that he intended to come down, and that he was aware of the deadline. Only after he hung up did he wonder if Chad hadn't already been hospitalized. God, he hoped not. He should have tried to call yesterday.

Nicky kicked away his sheets and looked at his legs. The nurse had removed the bandages earlier, since the incisions had already healed. The silvery areas were spreading. One spot had grown to the size of a pancake covering his thigh, and another had elongated into an oval shape, roughly the same surface area as the first.

He touched each spot, lightly at first, then rubbing vigorously. They felt soft, like ordinary skin. And now, although it could've been his imagination, the rest of his body had begun to shine with a faint reflective luster.

What was happening? He was some kind of freak. He wished he hadn't joked about turning into Aluminum Foil Man. Maybe he would have to buy a cape.

Dr. Eckel bustled in, carrying his folder and a long fax. She smelled of hospital hand soap. Slightly out of breath, she said, "I have some of the preliminary lab reports here. Sorry. The results aren't good."

Nicky jerked his hand away from the spot on his leg. "What is it?"

"Some kind of rampant retrovirus. They've measured impossibly high levels of reverse transcriptase. That means the virus is replicating at a

tremendous rate. This infection isn't slowing."

"But I don't feel sicker. It's just the fever and the shiny spots, now. No more itching, vomiting, and diarrhea. Even my headache is almost gone."

She shook her head. "You don't understand. Reverse transcriptase is highly mutagenic. It can integrate viral DNA into your cellular DNA. Remember our discussion about espresso and DNA damage? Except this is like the nuclear bomb version of espresso. At this concentration, it's affecting your cells."

Nicky thought a moment. "Cancer?"

"No signs of that yet —"

"Yet?"

She held up a hand to quiet him. "The concern is that the virus is now inducing mutations. And here's the hard part. The changes are, uh, organized."

"What do you mean?"

"The changes aren't random. So far, we've found orderly, identical DNA changes everywhere throughout your body. It's as if the virus has a master plan, and is making purposeful changes. For instance, the reflecting sheen on your skin is a very thin layer of precipitated metals, metals already present in the body. You would think your body had decided to armor itself."

"For what reason?"

"I don't know. Maybe to reflect sunlight? A UV barrier? Haven't you noticed? You need to powder your nose."

"You're telling me it's intelligent? That it's deliberately giving me protection against sunlight, against more melanomas?"

She laughed uneasily. "I'm not sure of anything, yet. There's probably a simple explanation."

"So I've got evolution's version of a terrific sunblock?"

Dr. Eckel turned serious. "Sorry. I was just speculating. A lot of people are getting concerned. The CDC has been working with us long distance. They've made their resources available to us. Scanning microscopy. Molecular biologists. State-of-the-art labs. Your tissue samples have been Fed-Exing around the country like jet-propelled hummingbirds. And the CDC is flying in an infectious disease team from Atlanta tonight. We're getting help."

"What about my brother?"

"The leukemia patient? You mustn't go see him. In fact, once the people from the CDC arrive, they'll probably quarantine you."

Something caught in Nicky's throat. Bad enough he couldn't face the marrow transplant, but all along he had thought he would see Chad in person. Before it was too late. It was all his fault. He should have never hopped the fence and gone to the pool. Things couldn't get worse. His

headache started again, a bowling ball rolling free inside his head.

Raul came to visit at dinner time. Nicky was glad for the distraction. Except that Raul wore his own gloomy expression.

"What's wrong?" Nicky said.

Raul took his time arranging himself comfortably in the visitor's chair. "We've been shut down."

"What?"

"Federal marshals and health officials. Decked out in haz-mat suits. You'd think we had gone camping at the Hanford toxics site. The pool was cordoned off and our samples confiscated. They even tried to put us through one of those decontamination showers."

"Did they explain?"

"A danger to the public health, they claimed. Baloney! Plus we were trespassing on government land. A federal offense. They threatened us with arrest unless we left immediately." Raul scowled.

"You okay?" Nicky said.

"Me? It's nothing new. Old age is synonymous with disrespect. You get used to it." Raul sighed.

"So that's the end of it?"

"Of course not. Who said anything about quitting? Tomorrow, we talk to the press. Just wait until you see the stink. Ha!" Raul glanced over to the door and grinned. "Besides, who said they got all the samples? Now, tell me. How are you doing?"

Raul listened intently while Nicky described the retrovirus, the reverse transcriptase, and Dr. Eckel's comments about the organized mutations. When Nicky finished, Raul sat quietly, scratching the stubble on his chin. He finally said, "Did you have a chance to look through that paleontology book?"

Nicky nodded. "Fascinating."

"Did you read the section about evolution? About there being two different rates?"

"The business about mass extinctions causing available niches? So the evolution rate increases because more species survive?"

Raul nodded his approval, then said deadpan, "Fishy."

"Fishy?"

Raul smiled. "The mass extinction theory

never felt right. I've always wondered if there might be a better explanation. 570 million years ago, the sea was inhabited by soft-bodied organisms. The same as it had been for hundreds of millions of years. Suddenly, shelled animals appear. An explosion of arthropods and brachiopods. Trilobites spread everywhere. An evolutionary burst."

"Weren't there a lot of available niches to be filled?"

Raul raised his hands. "What mass extinction happened? Since those niches were always there, they should have been gradually filled over a long period of time. You know, Darwin? Natural selection? No, something different happened to cause the burst." He tapped his fingers on the armrest and said, "I like Dr. Eckel's theory."

"You mean an intelligent mutagen?"

Raul said, "She might be on to something. What if 570 million years ago, a mutagenic agent appeared that could promote fast evolutionary changes? And not in the offspring but in the organism itself? And what if this agent could steer DNA changes to fit the available niches? It would certainly explain the biggest evolutionary burst that ever occurred. Trilobites going from nothing to suddenly becoming the dominant life form on Earth. In a geologic blink of an eye! Wouldn't that be fantastic, to have some kind of symbiotic retrovirus helping the host adapt to his environment? To fight diseases? To become a more viable organism? It's mind-boggling!"

"Are you saying that's what I have?" Nicky said.

"It's a possibility. A wild possibility, granted, but —"

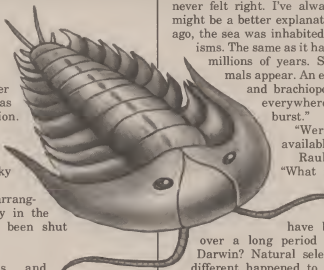
"Wait," Nicky said. "Why haven't we seen this virus before? If this thing appeared long ago, shouldn't we see its effects today?"

"Maybe we do, and just don't recognize them. 570 million years is a long time. Maybe it evolved and works a lot slower now. Or maybe it died off. If our hypothesis is correct — that somehow a piece of the Cambrian survived — you must have contracted the original ancestor virus."

Nicky looked at the patches of shiny skin on his legs. "This is the new generation of Man?"

"Perhaps. Or at least a version more resistant to UV. Maybe there could be other versions, depending on the danger. Such as those new cancers. It's already an epidemic, a horrendous one. If mankind weren't in such stasis, we would stand a chance."

"Stasis?"



"Not evolving. Or evolving too slowly. By the way, how's your brother?"

"Not good. I need to do the marrow transplant the day after tomorrow, at the absolute latest."

Raul said, "You'd never get past the initial screening. As soon as his doctors uncovered your infection, that would be the end of it. But my god! If you really had this symbiotic virus ..." He thought a while longer and sighed. "This whole thing calls for an unbelievable leap of faith. We're talking about unleashing a contagion that might horribly mutate the human race, or the craziest form of salvation imaginable!" Raul shook his head. "How does one know?"

Some time after Raul had departed, a shave-and-a-haircut knock sounded at the inner airlock door. Arthur strode in, looking oddly incomplete without his portable oxygen tank. Lively eyes cheered his face, and his gown looked more like sportswear from his lively stride. "I had a devil of a time finding your new room. I finally ran into that orderly who moved you. He told me."

Nicky said, "Wait. Are you supposed to be up and about?"

Arthur laughed. "I'm supposed to be dead. Don't I look it?" He did a pirouette.

"You look great."

"I feel great. To be honest, I'm amazed — everyone's amazed at my recovery. Remember how weak I was? I could barely get out of bed. And now look. My coughing stopped, which is unbelievable. I've been hacking for years. My lungs feel good. I'll bet you a jelly donut that if they did a biopsy on me, the cancer would be gone."

Nicky said, "That would be miraculous."

"Well, miracles I don't believe in, and it's not the chemo. All chemo does is make your hair fall out. So I'm calling it a remission. But enough with me. How are you doing?"

Nicky pulled his blanket aside and showed him the shiny patches on his legs.

"It figures," Arthur said. "Your nose looks like the tin man."

"It doesn't hurt. Dr. Eckel said it's caused by my virus. Even though I have the shiny skin and fever, I'm not in any discomfort."

"Funny you should mention that," Arthur said. "Shortly after we talked that second night, I developed a high fever, too. You wouldn't know it, but I'm running a 104.4° temperature right now. Plus a mild headache."

Startled, Nicky digested this and said, "Vomiting? Diarrhea?"

Arthur nodded. "Just for a short while. And a terrible itching all over." Arthur winked, then leaned forward. "You don't think I've got sow bugs, too, do you?"

They both looked at each other and burst out laughing.

Some time later, after Arthur had returned to his room, Nicky kept going over the sequence of events. One handshake, he told himself. One handshake, that was all. This was it, the thing he was afraid to voice even in his private hopes, a chance to square things with Chad.

Chad. Nicky wanted to cry out, to send him a telepathic message, that he was sorry, so godawful sorry, but that he would make amends, that he wouldn't let him die. Not like their baby brother Josh. His boyhood memories surged forward again. As clearly as yesterday, Nicky remembered Josh's futile bout with leukemia, his father's wretched pain each time he returned from having his marrow extracted to inject into Josh, the residual agony tattooed onto his father's face, the anesthesia woefully inadequate. His father, always so strong for Nicky, had been broken by the pain. Nicky had hated those evil doctors drilling into his father's bones, he had hated those horrible needles, he had hated the leukemia. But most of all, he had hated his little baby brother Josh. He had wanted Josh to die.

It all came back: that burning, impossible feeling when Josh finally died, the funeral, his parents crying, the little coffin slowly sinking into the ground. He had wished his baby brother to death. He had caused it. It had made perfect sense to him then. Nicky cursed, at himself, at his blind stupidity all these years.

Chad, how could you ever forgive me?

Nicky finished putting on his street clothes and walked quietly into the room airlock. After days of wearing a hospital gown, the clothes felt awkward and heavy, and his feet felt too big inside his tennis shoes. He checked the time. It was almost 9 pm Sunday, a little more than an hour since Arthur's visit. He wondered if the Tuesday marrow transplant deadline meant it would also be too late for anything else. He had to get to L.A.

Nicky took a deep breath and pulled open the outer door just far enough to stick his head outside. A buzzer sounded, an angry bee against the nighttime quiet. The corridor lights were dimmed. A single nurse, sitting at a long nurse's station opposite his door, looked up. She pushed a button to turn off the buzzer and said, "Yes?"

"Uh —" Sweat broke out on his neck. "Coffee. Could I have a cup?"

"At this hour?" She frowned, checked a clipboard, and said, "Oh, all right. There's a machine down at the end. I'll get you a cup. How do you want it?"

"Black."

"All right, but get back into bed. You're not

supposed to be outside your room. There's a call button, you know."

"Sorry."

"Anyway, those specialists from Atlanta will be here any minute. They called from the airport. I don't want you wandering around when they get here."

"Okay. Thanks." Nicky shut the door, and stayed in the air-lock. He let out his breath. His heart was beating wildly.

He waited 60 seconds, then pulled open the outer door again. The buzzer at her station sounded as before, but she was nowhere in sight. Nicky scooted over to her station and pushed the button. The buzzing stopped.

Corridors led both ways. To his right, he recognized the now empty corridor that the orderly had wheeled him down days ago. Several unused carts and wheelchairs were parked along one wall. Nicky turned in this direction. His shoes squeaked on the polished vinyl floor. He tried to walk quietly.

He passed six, maybe eight patient rooms. Voices came from several. At the far end of the corridor, he could see an elevator.

Nicky took a breath and tried to calm himself. At any moment, he could be discovered. He had to pass an open doorway with light spilling out. The hum of machinery came from within.

He peeked into the room, then jerked back. It was the snack room. His nurse was standing in front of a coffee vending machine, sideways to the door. Had she seen him?

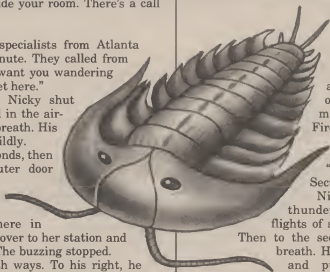
Nicky looked down the corridor, at the elevator that loomed in the distance. He couldn't cross in front of the doorway. She would spot him for sure. He backed up, holding his breath, only to bump a folded wheelchair. He tried to grab it but missed and it clattered loudly to the ground, the large rear wheel spinning like a roulette wheel. Breaking into a sweat, he stepped over the wheelchair and walked as quickly as he could in the direction he had come.

A woman's voice called out behind him. "What's going on?" And suddenly, "Hey! Hey!" Nicky looked back over his shoulder. "Stop!"

He broke into a run.

He ran past the nurse's station, past his room, and hurried into the orange corridor. More yells behind him. Nicky turned the corner and ran through a fire door, up a carpeted ramp, then down a long corridor. At the end of this corridor, a green sign announced EXIT. He rushed to the heavy metal door and flung it open.

Metal stairs led up and down. He headed down



as fast as he could, grabbing the rail and taking the stairs three at a time. His steps reverberated loudly. One landing, then another. The closed door on the next landing was marked, "Fourth Floor. Fire Door — Keep Closed."

A woman's voice said over an intercom. "Dr. Eckel to Iso. Security to Iso. Stat."

Nicky didn't stop. He thundered down two more flights of stairs to the third floor. Then to the second. Nicky gasped for breath. He reached the first floor and pushed the horizontal metal bar to open the door.

A male voice announced over the intercom, "Security. Code One. Security. Code One."

Nicky froze, then peered out the barely opened door. He faced the carpeted lobby. Automatic glass doors at the far end led to freedom. Two potted palms stood sentry on either side of the doors, and through the darkened glass, he could see the orange glow of the parking lot lights.

Unfortunately, a security guard stood by the doors, talking into a walkie-talkie. As he talked, his eyes scanned the lobby. Another guard stood at a counter, talking to three people in business suits: two men, one woman. They wore photo ID badges, and each one carried luggage with airport tags. The disease team from the CDC! From Atlanta. Here to quarantine him.

In the stairwell, voices and a pandemonium of footsteps sounded above him. They were following him down.

He couldn't escape through the lobby, and he couldn't wait here. He released the door, leaving it ajar, and hurried down the stairs.

The steps changed from metal to concrete, and he could move quietly. The footsteps of his pursuers grew louder. He reached the landing and went down one last flight. A sign announced, "Basement. Fire Door — Keep Closed." Opening it would make too much noise. He pressed himself flat into the doorway and held his breath.

The footsteps of his pursuers stopped on the landing directly above his head.

"Look, the door's open," someone said.

"Wait," another voice said. "Let me take a quick look downstairs."

Nicky could see the shadow of someone leaning over the railing, peering down. He froze. The shadow shifted from side to side. He heard one footprint, then two. The searcher was coming down

to look! His heart pounded.

"Security. Code One," the intercom blared again.

"Come on," the first voice said. "He's going to get away."

The door squeaked open, then hissed shut with a solid click. Then silence.

They were gone.

Nicky's palms were wet, so he rubbed them on his trousers and then opened the heavy basement door.

A nondescript hallway led to a large utility room with a bare concrete floor. The area was lit with incandescent bulbs. A tangle of pipes ran overhead, and a big steam boiler squatted in the middle of the room. A low rumbling filled the air.

A train of carts loaded with fat laundry bags lined one wall. The train led to an uphill ramp with a closed roll-down steel door at the top. A service elevator stood open, and someone was pushing another cart of laundry to join the train. Nicky waited out of sight until the elevator doors closed.

He hurried past the laundry carts. Next to the ramp, at the top of a short flight of stairs, was an emergency exit.

Nicky dashed up the stairs. As soon as he opened the door, a clanging bell sounded overhead. He was in the parking lot in the damo night air. He ran to his car, grabbing his keys from his pocket. The car started immediately, and he backed out of his space and gunned for the exit.

Nicky expected someone to show up any moment to detain him. But no one had been waiting at his apartment when he had rushed home to pack a bag. He had taped a Band-Aid over his shiny nose, deciding that it would pass casual scrutiny. He drove to the ATM machine at his bank, and then to the airport.

At the airline counter, he purchased a one-way ticket for Los Angeles under an assumed name. He would catch the last flight for LAX.

Even at this hour, a few travelers wandered through the SeaTac terminal. Their footsteps echoed in the wide open ticket lobby. Bright ceiling lights glared on the tile floor. There was no sign of anyone from the hospital, nor the CDC. But that didn't mean he was safe. Nicky kept to the shadows and found a pay phone obscured from general view.

A stale smoke odor hovered over an ashtray where a lipstick cigarette butt lay crushed. Chad's phone rang four times. Then five. Then six. He and Chad hadn't talked since Friday. Was he too late?

"Hello?"

"Chad! It's me!"

"Nicky! For godsakes. Where have you been?"

Nicky let out a huge sigh. "I'm at the airport. I'm coming down tonight. Can I stay with you?"

"Of course. When do you get in?" Chad could barely squeak out the last sentence. He sounded weak.

Nicky gave him the airline information.

Chad said, "Can't drive anymore. I'll grab a cab and meet you."

"If you're that sick —"

"No. Anything to get out of this apartment."

Nicky took a deep breath. "I ... I've got some bad news. I've still got the infection." There was silence from the other end. Nicky said, "Your doctors aren't going to allow the marrow transplant."

"Then I'll just have to insist."

"We might not need to do it," Nicky blurted.

"What happens, happens. I'm just happy that you're coming. I'll get the espresso machine out. You don't know how much it means to me, God, it'll be good to see you, even if it's for the very last time."

Nicky had to shut his eyes tight to hold everything back. "Stop it. Everything ... everything's going to be okay. I'll see you soon."

After he hung up, Nicky sagged against the phone. He checked his watch. The plane had already started loading. He hurried toward the gate.

As Nicky exited the plane, he was struck by the warmth of the southern California air, even though it was past midnight. A family of four moved up the airway ahead of him, the mother pushing an infant in a stroller, and the father carrying a sleeping child.

Black nylon straps cordoned a path into the terminal. On either side, a scattering of people waited. Nicky scanned their faces but couldn't find Chad. The family ahead of him was greeted by someone, and they stepped out of line. The instant they moved aside, Nicky saw a redheaded police officer directly ahead, scrutinizing the passengers. In his hand, he held a fax. Nicky froze, but too late. Redhead spotted him, glanced at the fax, and pointed.

A gloved hand reached from one side and took Nicky by his arm. "Come with me, please."

He felt sick. The gloved hand belonged to another policeman, a shorter Hispanic man with a beefy build. Beefy led Nicky away from the people milling around the gate.

"Nicholas Leitner?" Beefy said.

Nicky couldn't speak. He could only nod.

Beefy's cheeks were pockmarked with acne scars, and he had an unnerving stare to his dark eyes. Beefy said in a surprisingly gentle voice, "We've been asked to escort you to County General, and to take you into custody, if necessary. Will you cooperate?"

Nicky nodded again. He felt numb.

"Did you check any luggage?"

Nicky stammered, "Just this carry-on."

They headed down a corridor. Redhead walked on his left and Beefy on his right, his gloved hand on Nicky's shoulder. Nicky could imagine the police car waiting outside, ready to whisk him to another isolation ward, to more confinement. And with a guard, this time.

His knees felt weak. What had he been thinking of doing? Had he lost his mind? He could already picture the headlines: *Typhoid Mary Caught! Mutant Disease Stopped!* He had no right to come here, to spread his infection, to jeopardize the world. They were right to lock him up.

The same family of four that had exited the plane in front of him walked ahead of them. For some reason, the child in the stroller triggered a memory of Josh. That's where this whole stupid thing had started. With his baby brother.

At the far end of the corridor, the luggage X-ray station and the metal detector blocked the left side. They were lined up waiting to enter. Chad was in the line! He wore a windbreaker, and, like Arthur, he carried a portable oxygen unit. Chad looked terrible: a slouched posture, sallow complexion, almost no hair left. Like Arthur.

In an instant, Nicky knew.

Arthur had been facing certain death, and now lived. Chad, too, deserved to live. And Josh, too — all the Joshes, still in the cradle, potential Churchills or Curies or Shakespeares all.

Nicky's choice was clear.

Nicky cried out, "Chad! Chad!"

Chad spotted him. In one motion, Nicky dropped his bag, twisted his shoulder free, and bolted forward.

"Hey!"

Nicky sprinted toward the right side of the X-ray machine, to the opening where the passengers leaving the gate could walk through unobstructed.

"Stop! Stop him!"

A guard at the X-ray machine jumped forward to intercept him. Nicky veered to his left, toward the metal detector. An older woman stood frozen on the other side of the detector.

A body lunged at him. Nicky tried to dodge away, but a hand grabbed his ankle. He tripped and fell through the detector, missing the woman. He slammed into the metal base.

White pain swallowed his face, his forehead exploding. The room fuzzed. Somewhere, far away, a buzzer sounded, an irritating mosquito. Someone grabbed his left arm and twisted it painfully behind his back. He couldn't get up.

"Everyone get back!" someone shouted.

Nicky tried to lift his head and focus. Beefy was looking at him, his face upside down. "You all right?" Beefy said to someone, "It's okay. Don't do that," and Nicky felt the painful hold on his arm ease up.

Just behind Beefy, Chad was crouched, his mouth open.

Nicky reached out with his free hand. "Chad ..." His voice sounded like it belonged to someone else, like it didn't come from his own throat. Something warm ran down his face. Everything was spinning.

Chad reached for Nicky's hand, but Beefy put out his arm to block him.

Nicky summoned everything he had left. "Chad!"

Chad said, "That's my brother, Officer!"

Nicky collapsed, and his arm fell heavily. He had failed. Chad would die. Like Josh. Like millions more.

Chad put his hand on Beefy's outstretched arm. "Please!"

No one moved.

Quietly, Beefy said, "All right, but don't touch his face — especially the blood."

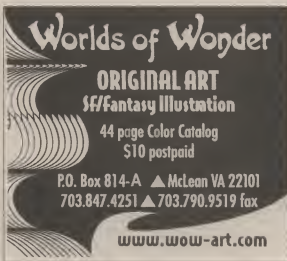
Balanced on the razor's edge of consciousness, Nicky felt Chad take his hand and squeeze. Chad said, "It's okay, Nicky. I'm here for you now. Everything is going to be okay." □

Guidelines for a SASE

Aboriginal SF has free guidelines for writers and artists interested in getting their work published. Send an SASE (Self-Addressed, Stamped Envelope) to:

Aboriginal SF Guidelines
P.O. Box 2449
Woburn, MA 01888

Or download a copy of the guidelines from:
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An Attack of Indecision



As I was preparing this column it was early December, and the shock of Election Indecision 2000 had gripped the nation for almost a month. With a little imagination, I could see parallels between our country's plight and the plots of several of the stories in this issue.

Think of the United States governmental system as one vast organ-



Anthony R. Lewis

ism. The election stuns that organism into a state of suspended animation — alive, but zombified — call it “post thanatic,” à la **Anthony R. Lewis's** story “Requiescat in Pace.” Meanwhile, the organism's crisis triggers the release of swarms of invading, semi-intelligent, self-replicating microbes such as the ones you find in “No Job Too Small” by **Wil McCarthy**, and which we call lawyers. As the lawyers struggle with the immune system known as the courts, the fate of governmental health lies in the balance. Will the



Wil McCarthy

bugs overwhelm the system? Will they be sent packing? Or will the organism eventually accommodate seemingly unresolvable demands by the tiny invaders and so gradually and painfully evolve into something healthier, as we see in **E.H. Wong's** “Something Old, Something New, and Espresso”? I sincerely hope, but I can't be sure, that by the time you read this we will know the answer.

In “17 Views of Mount Taranaki” by **Peter Friend**, aliens have landed with a bang in New Zealand, and the communication between intelligent races must begin, but how?

Peter Friend has sold fiction to *Aurealis* and *Interzone* Magazines, and the New Zealand anthologies *Rutherford's Dreams* and *Antipodean Tales*, as well as numerous magazines and newspapers. His stories have twice won the Paul John Statham Memorial Fantasy and Science Fiction writing competition. In real life, he's a computer analyst, but hopes to one day become a full-time living art treasure.

“17 Views” is illustrated by **Jaël**. I caught up with her by e-mail while she was getting ready to attend Philcon 2000 in Pennsylvania. After that she had two commissions to finish before the holidays, while still teaching several classes at Montclair Art Museum, and beginning to work on her book of art scheduled to come out in the fall of 2002. She was also excited about a Dominican Republic getaway her husband Greg was planning for them and seeing her children and grandchildren for the holidays.

You may think cockroaches, mice or termites in large quantities can be pests, but they are nothing compared to the bugs an intrepid exterminator faces on a daily basis in **Wil McCarthy's** “No Job Too Small.” McCarthy's first published story, “What I Did with the OTV Grissom” appeared in *Aboriginal SF* issue no. 21, and his story “Amerikano Hiaika” followed in issue no. 27. Now his sixth novel *The Collapsium* is out, and it's an Amazon.com Editor's Choice for 2000. The opening novella of this “hard SF fairy tale,” as

McCarthy describes it, was shortlisted for the Theodore Sturgeon award, and **Roland Green** of Booklist reportedly calls the novel “ingenious and witty — as if **Terry Pratchett** at his zaniest and **Larry Niven** at his best had collaborated.”

McCarthy is a robotics engineer who lives with his family in Colorado and writes a monthly science column for the Sci Fi Channel's web site at



Larry Blamire

<www.scifi.com>.

“No Job Too Small” is illustrated by **David LeClerk**, who when I spoke to him had just come back from attending Chicon, the Chicago Worldcon, with fellow artist and friend **Charles Lang**. LeClerk says he met a lot of good people at the con. Meanwhile he is trying to switch from pencils to oils and is working on some color pieces. Some of his as well as Lang's work can be seen on the online gallery run by **Chris Tice** of Salem, Massachusetts: <www.horrorartonline.com>.

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Peter Friend



E. H. Wong

The protagonist of "Something Old, Something New, and Espresso," by E. H. Wong, has to deal with guilt over his brother's illness while he is coming down with a mysterious ailment of his own.

Wong's first sale was to *Aboriginal SF*, the story "Endangered Species" in issue no. 49-50. He has also sold stories to *Pulphouse*. He has a master's degree in electrical engineering, but prefers to rehab distressed property and work as a real estate broker. He lives in California with his family.

"Something Old" is illustrated by **Clyde Duensing, III**, who by chance lives in Volusia County, Florida, one of four counties asked to do a hand recount after the election. When I contacted him in mid-November, he said living in the midst of the election mess was "weird," and he had witnessed among other things his state being compared to a rotten fish in political cartoons and to a banana republic by *Newsweek*. He added that "The situation has led to lively discussions around the house since my wife, **Amanda**, and I voted for opposing candidates." He added "I guess we'll see how it turns out — someday."

A desperate real estate broker



Clyde Duensing, III

takes on a dangerous client in "Reality's Real Estate" by **Denise Lopes Heald**.

Heald's first professional sale was "Riffles" in *Aboriginal SF* issue no. 31-32, and she has since published more than 20 short stories and the novel *Mistwalker*, a Del Rey release. Her latest work, "The Needed Stone," is scheduled to appear in an upcoming **Marion Zimmer Bradley Sword and Sorceress** anthology. Watch for another story of hers in an upcoming *Aboriginal SF* as well. Heald says her own recent search for an Idaho residence turned up no offerings quite as interesting as the listing in "Reality's Real Estate."

"Reality's Real Estate" is illustrated by **Jael**.

The human capacity for religious belief is stimulated by the appearance of a mysterious orb in "A Wheel in a Wheel" by **Debbie Stitt Baker**.

Baker has lived in the San Francisco Bay area for a number of years, but still calls Kansas her home. By day she recruits IT (Information Technology) professionals for the city of San Francisco, America's most wired city, but by night she is wired to the SF world. Her first professional sale and many of her subsequent articles and stories appeared in *Midnight Zoo* magazine.

"A Wheel in a Wheel" is illustrated by **Beryl Bush**, whose illustrations have recently appeared in *Analog* and *Artemis* magazines. We regret to hear of sad times for her, however. She has set aside professional matters for the last few months due to the illness and death of her father, the person who introduced her to science fiction. She says he was "a great father and a really good friend whose advice, encouragement, intellectual curiosity and spirit of fun will always be missed."

"Requiescat in Pace" by **Anthony R. Lewis** is a tongue-in-cheek version of *The Stepford Wives*. NESFA (New England Science Fiction Association) is the club that puts on Boskone, NESFA Press is the "publishing pseudopod" of NESFA, and Lewis is the "tsar" at NESFA Press. The press has just published an expanded and updated version of the *Concordance of Cordwainer Smith*, compiled by Lewis, as well as *The Essential Hal Clement, Vol. 3*, compiled by Lewis and **Mark L. Olson**. Lewis says he is also spending some time lately doing genealogy research.

"Requiescat in Pace" is illustrated by **Larry Blamire**, who recently moved out to L.A. with his wife,



Denise Lopes Heald

actress **Jennifer Arnold**. When I contacted him in November, an "exhausted" Larry e-mailed me that he had just written and directed a low-budget indie film called *The Lost Skeleton of Cadavra*. He says, "Jen and I are both in it. It's a spoof of 50's sci-fi/horror black-and-white cheapies." He promises more details at a later date.

Our cover illustration, titled "Pool Shark," is by artist **Jeff Rossman**. Rossman attended San Jose State University and majored in illustration. In the four years since he graduated he has been a freelance painter and illustrator, and he also works as a senior designer at click2learn.com, an e-learning software company. Lately his hobbies have been learning 3-D software and setting up his new studio in the house he and his wife, **Amy**, bought in Massachusetts this past year. But playing pool is a longtime passion of his, and this piece was done several years ago for a friend who has a billiard parlor in his home. The friend thought he would beat Rossman at a few games and get a nice work of art as payment, but since the friend lost, he ended up having to commission the painting. □



Debbie Stitt Baker

The World Fantasy NON-Awards



I just finished casting my votes for the World Fantasy Awards 2000, and though the competition does not include a film category, the judging committee (Suzi Baker, W. Paul Ganley, Tim Holman, Melissa Scott, and I) agreed that the winner would have been *The Sixth Sense*, although some of the judges also admired *Being John Malkovich* as one of the most original, wackiest fantasy films ever produced. Another runner-up might have been *Stir of Echoes*, a moderately effective version of Richard Matheson's 1958 novel, *A Stir of Echoes*. (Maybe the 1962 film *David and Lisa* displayed sexism when it reversed the novel's title, *Lisa and David*, but can anyone make sense out of *Stir of Echoes* dropping the "A"?)

Though no movies appear on the list of World Fantasy Award finalists, two film books compose one-third of the possible candidates in the Special Award, Professional Category: *The Essential Monster Movie Guide: A Century of Creature Features on Film, TV and Video*, by Stephen Jones, with an introduction by Forrest J. Ackerman, and *Millennium Movies: End of the World Cinema*, by Kim Newman, with a foreword by David J. Schow.

Both titles, released by the British publisher Titan Books, are eminently readable bedside books. Newman's style is remarkable, both scholarly and informal, while Jones's is fan-ish, collectorial, and idiosyncratic — which is an idiosyncrat-



Elizabeth Hurley ... aka The Devil

ic way of saying I don't agree with all of Steve's opinions, though, to paraphrase Walt Kelly, I'll defend to the death his right to use "that tone of voice!" The only thing missing from these enjoyable books is the bowl of popcorn you'll have to make while reading them.

At press time, Warner Brothers had slated November 3rd to premiere its science fiction thriller *Red Planet*, but no release dates had yet been announced for the SF comedies *The Million Dollar Hotel* (Icon Productions; formerly *The Billion Dollar Hotel*), starring Mel Gibson and Bono, or *Mothman* (Mr. Black Productions), though both features reportedly have been completed. The former, a comedy-thriller directed by Wim Wenders, is about the investigation of the death of a rich man's son at a disreputable hotel. *Mothman*, set in West Virginia, is just what it sounds like, and is not connected with another film-

in-the-making, *The Mothman Prophecies*.

Another science fiction comedy that has been completed but not released is *Alien Love Triangle*, starring Kenneth Branagh, with Courteney Cox as an oddly amorous extraterrestrial. As originally filmed, this was a three-part anthology, but a spokesperson for Miramax said the producers have decided to expand the first of the stories into a full-length feature. It has not yet been decided what to do with the other two parts.

When Stanley Kubrick died, he had been planning to start work on *Minority Report*, a science fiction film based on a Philip K. Dick short story. With Kubrick's passing, Dreamworks/20th Century Fox/Blue Tulip Productions announced that the project would be taken over by Steven Spielberg, with Tom Cruise starring. A Dreamworks spokesman said

scheduling conflicts have delayed *Minority Report*, but in the meantime, Spielberg is working, instead, on *A. I.*, a 21st Century science fiction tale based on a Brian Aldiss story. It is tentatively slated for release in June 2001.

Fantasy appears to be leading science fiction this fall in the cinema industry; openings have been scheduled for six films from mid-October through late December, and another four may also receive their initial screenings before the century ends. Though release dates are quick to change, at press time the following premieres had been announced by various studios:

OCTOBER 13th — *Lost Souls* (New Line Cinema), starring Winona Ryder, Ben Chaplin and John Hurt, is the story of a Christian who must convince an atheist reporter that the Devil exists. One hopes it will be done more convincingly than last year's *End of Days* (not that it would take much), in which Satan planned to accomplish another Armageddon as the clock struck on New Year's Eve, 1999, signaling the close of the century. (Is it asking too much for Arnold Schwarzenegger to be aware that the new millennium does not begin till January 1st, 2001? You'd think Lucifer at least would own an accurate chronometer ... or a few up-to-date newspersons.)

OCTOBER 20th — Twentieth Century Fox has remade the comedy fantasy *Bedazzled*. The new film, with the same title, features Brendan Fraser as a nerd so hopelessly smitten by a coworker (Frances O'Connor) that he enlists the aid of the Devil (Elizabeth Hurley) to win her. The 1967 original, starring Peter Cook, Dudley Moore, and Raquel Welch, is a cult classic that will be difficult to beggar, though the new film was cowritten by a comedy



Temptation...

"great," Larry Gelbart, in association with Peter Tolan and Harold Ramis, who also directed.

OCTOBER 27th — *Book of Shadows: Blair Witch 2* is planned by Artisan Entertainment and Blair Witch Redux, the production company, to be ready in time for Halloween. Rumors of several plot-lines have been reported, including a prequel about the witch herself, another semi-prequel about the serial killer mentioned in the early portion of the original film, a genuine sequel about the search to find the missing film makers, and, according to Jeff Rovin in *Science Fiction Chronicle*, a sequel "which is reportedly so bizarre no one wants to talk about it."

With all this foreshadowing, I decided it was time for me to take a look at *The Blair Witch Project* itself. Friends and colleagues had given it such bad to lukewarm "oral press" that I skipped seeing it when it came to my neighborhood. Thus I was prepared to dislike it. To my surprise, I found it a surprisingly effective and imaginative horror film. Its handheld, amateurish character may have misled some viewers into thinking it was itself amateurish, but I suggest that the director Daniel Myrick

knew exactly what effect he was after, and chose the precise methods to achieve it. The handheld, jittery sequences alternating with "planted" still shots are as calculated as a carnival ride: it attacks the nerves in a variety of ways (I got so queasy I had to pause the videotape, a luxury I would not have had in the movie theater). Perhaps the most daringly sensible choice was to employ nonspecific suggestion right up to the climax. Hard-to-define sounds in darkness, frantic searching shots of the woods at night, the sudden appearance of a dilapidated house that briefly promises haven, only to become the ultimate horror, and at the very end a strange ambiguous visual that raises unanswerable questions.

It is possible that *The Blair Witch Project* achieved its artistic and commercial success serendipitously, but one thing is certain: it is going to be a lot more difficult for the sequel(s) to use a similar formula and succeed. As Maria Ouspenskaya might say to the filmmakers, "I wish you luck!"

NOVEMBER 3rd — Brendan Fraser, costar of *Bedazzled*, plays the role of a cartoonist in a coma, metaphorically represented as being trapped in a place halfway between life and death,



Exorcist redux in *Lost Souls* ...

in the Fox/Skellington Productions fantasy *Monkeybone*. Based on a comic book by Kaja Blackley called *Dark Town*, *Monkeybone*'s cast also includes Whoopi Goldberg, Bridget Fonda, and Paul Reubens in the title role.

NOVEMBER 17th — Does Jim Carrey and Dr. Seuss sound like an inspired match? If you think so, you'll want to take the kids to *How the Grinch Stole Christmas*, the perennial children's TV special remade from the book into a feature film directed by Ron Howard and starring Molly Shannon, Jeffrey Tambor, Christine Baranski, and the rubber-faced Carrey as the Grinch-y critter who disguises itself as Santa Claus in order to hijack Yule trees, feasts, and presents. And if the Carrey-Seuss marriage sounds good to you, you'll probably also go for

Tim Allen playing the title role in the Steven Spielberg-Imagine Entertainment production of Dr. Seuss's children's classic, *The Cat in the Hat*, still in development. Another inspired match, possibly suggested by 1996's *Space Jam*, would feature Robin Williams opposite Bugs Bunny, but this deal is reportedly in a very early stage of negotiations at Warner Brothers.

DECEMBER 29th — Revisionist history characterizes the plot of *Shadow of the Vampire*, a Saturn Films/Lion's Gate tale of the making of the early vampire film *Nosferatu*, with John Malkovich playing the great director F. W. Murnau and Willem Dafoe as Max

Schreck, the pseudonymous actor who portrayed the vampire in the original, and whose German surname has been variously translated as "terror" or "horror." The story involves members of Murnau's production crew falling ill and dying. Ah, what can the trouble possibly be? Somehow I suspect the screenplay will not mention that Murnau, like many movie makers, ripped off his idea from Bram Stoker without obtaining the permission of the author's estate, which subsequently sued the production company and won.

Trivia question: In what other fantasy film does a character named Max Schreck appear, and who plays him? [Answer at the end of this column.]

Three movies scheduled to be released soon: New Line Cinema's *Dungeons and*

Dragons, with Jeremy Irons, Thora Birch, and Justin Whalin; *Sinbad: Beyond the Veil of Mist*, an animated adventure-fantasy with voices by the ubiquitous Brendan Fraser, Jennifer Hale, Mark Hamill, Leonard Nimoy, and John Rhys-Davies; and Touchstone Pictures' *Unbreakable*, a promising re-teaming of Bruce Willis and M. Night Shyamalan, writer and director of *The Sixth Sense* and this film, about a man who survives a devastating train crash without a scratch on him.

RERUN REPORT: Thanks to video stores and Pay Per View TV, I've seen some films that were in and out of the local Loews too fast to catch during their initial runs. One such was *Stir of Echoes*, which contained thematic and character similarities to *The Sixth Sense*.

Even more striking is *The Thirteenth Floor*, a stylish science fiction riff with a similar theme to the more popular *The Matrix*, which I thought a convoluted mess with unpleasant characters and endless martial arts and gunplay that might even bore Sam Peckinpah. *The Thirteenth Floor*, on the other hand, is a stylish marriage of high-tech and film noir. Its characters are much more appealing and ultimately more sympathetic, and the story has a nice surprise twist towards the end.

A third film treatment of the notion that the world may be a holodeck is the Canadian-British *eXistenZ*, which mixes virtual reality with a touch of Pirandello and comes up with the last word on computer simulations. Writer/director David Cronenberg asks us to consider what is real and what is illusion, and comes up with no easy solutions ... and that's putting it mildly! Several other film critics whose opinion I respect found little to recommend in *eXistenZ*, but I thought it remarkably well done, marred

only by Cronenberg's obsession with gross-out visuals, a stylistic excess on his part that reminds me of Paul Verhoeven's childish fascination with blood and guts, which he carries to ultimate extremes — even for him — in *The Hollow Man*, a dreary clone of H. G. Wells's *The Invisible Man* that even the estimable Kevin Bacon can't rescue.

If you have not yet seen the black comedy *Dogma*, it's worth renting on videotape, though I recommend it with reservations. At its best, it is a very funny fantasy about the Catholic Church. Ben Affleck and Matt Damon do a wonderful turn as exiled angels who discover a loophole in church dogma that will permit them to reenter Heaven. Unfortunately, if they succeed, it would be tantamount to an admission that God made a mistake, and that would signal the end of all existence.

Dogma's irreverent humor is hilarious for much of the movie, and George Carlin also contributes some funny moments along the way, but the story is too dragged out and gets a bit nasty as it reaches its climax. The biggest drawback, though, is that despite its apparent iconoclasm, it tacitly suggests that, when rid of its out-of-touch ecclesiastical structure, Catholicism is still the one true religion. It also stirs the specter of prejudice when it casually accuses the Jews of killing Christ and even has a Jewish doctor playfully shrug off the offensive remark — a stretch of pure fantasy if there ever was one. Note to writer-director Kevin Smith: ask Tim Rice about the trouble stirred up over the same issue in the first version of *Jesus Christ Superstar*. Rice and Andrew Lloyd Webber ultimately added an additional musical scene that deflected the criticism.

Answer to Trivia Question: Christopher Walken played the



Winona goes for a ride

villainous Max Schreck in Tim Burton's 1992 feature film, *Batman Returns*. □

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'Offbeat' — It's a Compliment

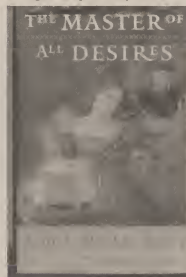
The Master of All Desires

By Judith Merkle Riley

Viking, 1999

386 pp., \$26.95

This book is a little hard to describe — it's a fantasy, all right, but it's also a rather well done historical novel set in France in the mid-1500s (the young Mary, Queen of Scots, has a minor role). The Medici Queen of France, who is jealous of her husband's powerful mistress, and the political maneuverings among the top nobility form the



underpinnings of the plot.

The Queen wants to get possession of the head of Menander, an ancient Greek sorcerer who acquired immortality but lost his body. For almost 2000 years

Menander's living head has been in a box and cursed to grant any wish made of it. Menander has long since turned to evil and invariably finds a way to grant each wish so that the wisher is worse off than before.

The Head of Menander the Undying has passed from magician to magician, some strong enough and wise enough to refuse to wish on it no matter how much Menander tempts them, others falling prey and making a wish — and then making still more to undo the ill effects of the first.

Nostradamus is one such, who wished for the gift of prophecy and was saved from complete disaster by the loss of the Head. He's lived his life known as a prophet, but eternally frustrated, since he gains his foreknowledge by his command of Anael, the Spirit of History. Unfortunately, Anael is very disorganized and can only rarely find what Nostradamus asks for, usually answering a question about the victor of an upcoming battle with an apology and an offer of a description of the Scopes Monkey Trial or details on the Meiji Restoration's effect on Sino-Japanese trade.

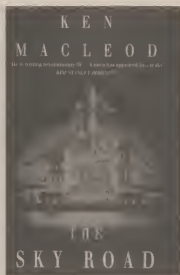
A young woman, a would-be poet, accidentally gains Menander's box and is immediately subjected to Menander's constant temptation to use the wishes. Wanting the box herself, the malevolent Queen is after her and ultimately catches her; her family is trying to marry her off to an old man for his money; her father has just been arrested as a heretic; the King's mistress's Italian poisoner has been told to poison her — and there are a dozen other sub-plots.

And on top of everything else,

the book is a bit of a farce, for amidst the serious issues there is a lot of silliness — chases and mistaken identities and the like; Menander is grumpy and querulous as well as being quite, quite evil; half the time the various sorcerers and poisoners achieve exactly the opposite of what they intend, and so on.

This is a very good and very offbeat fantasy.

Rating: ☆☆☆☆



The Sky Road

By Ken MacLeod

Orbit, 1999

291 pp., \$16.99

Tor, 2000

291 pp., \$24.95

Another marvelous book by Ken MacLeod!

The Sky Road fits in an interesting way into the general future history MacLeod used in two other books, *The Cassini*

Rating System

- ☆☆☆☆☆ Outstanding
- ☆☆☆☆ Very Good
- ☆☆☆ Good
- ☆☆ Fair
- ☆ Poor

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Division and The Stone Canal, and has a number of people, events, and places in common.

Briefly, the future history has the early 21st Century dominated by a US-led alliance trying to keep a lid on an increasingly fragmented world — many governments follow the Soviet Union in dissolution, creating anarchy over most of Asia and elsewhere. At the same time, the Internet and the computer revolution accelerate, and a Vingeian Singularity looks likely.

In fact, there are three Singularities brewing, two of them Vingeian. One classic Vingeian singularity grows out of the Internet — the world (that part that hasn't collapsed into anarchy, that is) is tied more and more closely together, and e-commerce proves stronger than any other ties, leaving all societies

not spread beyond there. An SF-derived band of space fanatics, however, is determined to head to the stars and is busy building the hardware up in L5 to go interplanetary and eventually interstellar — and to download themselves into AIs to make it easier.

A third singularity, the Sheenison, a weird crypto-randian-libertarian-communist (!) movement that sprang up in Korea when China and both Koreas dissolved, is slowly conquering Asia. They don't use computers — at least, they don't use *electronic* computers — they don't deal with anyone else, and they seem unstoppable. Life in the Sheenison sphere is life after a different kind of singularity.

Maya Godwin was a lesser player in *The Stone Canal*, where she and Jonathan Wilde were lovers. He is the head of the International Scientific and Technical Worker's Soviet, a tiny quasi-government set up by scientists and engineers after Russia's collapse to control the Baikonur space launch site — and its store of nuclear weapons. Maya has made a go of the ISTWS by marketing time-shared deterrence — for a price, the ISTWS will guarantee to nuke anyone who invades one of its clients. Since the world is otherwise disarmed, this is a potent threat.

The story is told in alternating chapters. Even chapters are in the 2040s and tell Maya's story, while odd chapters are set perhaps 500 years later in a semi-utopian world that has somehow avoided the impending singularities and has forged a new, quiet, rather pleasant life. This part of the story is set just north of Glasgow, where a spaceship is being constructed, the first to be built in centuries.

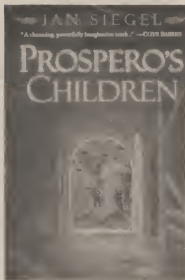
As we go on, we learn that when the old civilization fell, some things were saved — cheap, portable fusion power, for example — while other things (like computers, television, and anything that might lead again toward a dreaded Singularity)

are not only gone but regarded as dangerous Black knowledge.

Clovis colha Gree (that's his name) is a young history grad student earning his living by doing welding work on the ship. (It's made, like an oceanliner, out of heavy steel plate — with unlimited fusion power, weight isn't an issue.) He runs into a tinker (an itinerant programmer) named Merrial, falls for her, and gets involved in her quest to recover records associated with Maya Godwin — who we learn is revered the world over as The Deliverer, and apparently saved the world from the Singularities.

There are some interesting twists in the story I won't detail here.

It is well-told, exciting, a good love story, and very believable — *had I but known*, it would have been right up there with *A Deepness in the Sky* at the top of



utterly and completely market-driven. (Jane's has dropped old-fashioned publications like *Jane's Fighting Ships* in favor of *Jane's Market Forces* — few conflicts are decided by mere physical force any more.) The world is rapidly changing to become stranger than we can understand.

The other classic Vingeian singularity is happening in space. While near-Earth space is hugely crowded with machines, weapons, and people, man has



my Hugo list for 1999. With the recent extension of eligibility for British books, I will certainly nominate it for 2000.

Besides being a damn fine story, what makes it especially interesting is that it only sort of fits into the future of *The Stone Canal* and *The Cassini Division*. The 2040s chapters — all but the last, that is — seem to mesh perfectly with the other books, but at the end, Maya takes a decisive step, aborts *all* of the impending

singularities, and creates the pastoral near-utopia we see five hundred years later in the odd-numbered chapters.

So. The even-numbered chapters are in the post-Singularity universe of *The Stone Canal* and *The Cassini Division*, but the odd-numbered chapters (and the last even-numbered chapter) are in an alternate universe.

Neat, really. And a great story, too.

Rating: ☆☆☆☆1/2

Prospero's Children

By Jan Siegel
Del Rey, 1999
348 pp., \$24.00



This has been called a refreshingly different fantasy. Well, that's half right.

A 16-year-old girl and her brother are spending the summer in the Yorkshire house left to them by an uncle. Their widowed father is away on business, but his latest girlfriend is spending the summer with them. Evidently she's after something, and after the girl meets and befriends a wandering old man who says he's an immortal ex-wizard, she learns that her uncle had possessed a talisman from Atlantis and her father's girlfriend is a powerful witch who is looking for it.

This whole section — the first half of the book — is excellent. It's first-rate modern fantasy

with some truly creepy sections and a most effective evocation of magic and the mysterious.

Unfortunately, Siegel couldn't leave well enough alone and added a second half to the book where the girl travels back to Atlantis to set things right and has a fairly routine set of fantasy adventures. Not bad at all, and with some very effective scenes here and there, but a jarring addition to the quite good first half of the book.

It's worth reading, but it would have been better without the second half.

Rating: ☆☆☆

The Empire of Isher
By A. E. van Vogt
Orb, 2000
352 pp., \$14.95

A. E. van Vogt's recent death reminded me that I ought to re-read some of his novels, so I picked two that I remembered with the most pleasure, and which Orb has just reissued in a single volume, and I wasn't disappointed.

The two *Weapon Shops* novels are both quite short by today's bloated standards. The first one, *The Weapon Shops of Isher*, is a fix-up, combining a novella with a novelette and some additional material — one of van Vogt's favorite techniques.

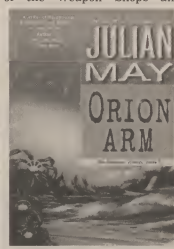
Both are set in a distant future about 7000 years from now, but it is really the 1950s with a bit of glitter added. The world — indeed, the entire Solar System — has long been unified in the Isher Empire, a genuine none-of-this-limited-monarchy-crap Empire. Isher rules peacefully and fairly lightly because the all-powerful Imperial Government is counterbalanced by the *Weapon Shops*, whose superior science makes them invulnerable to Imperial weapons and who sell defensive guns to anyone who wants them. (The guns literally can't be used except for hunting or self-defense.) The *Weapon Shops* also run a parallel judicial system that dispenses civil justice to anyone cheated by the

Imperial government.

This political situation has existed, stable and generally pretty free, for thousands of years.

The stories tell of a threat to this order coming from an Imperial government determined to do away with the *Weapon Shops* and a new threat due to a bit of overweening ambition on the part of the *Shops* as well.

Both times, Robert Hedrock, Earth's one immortal man (and scientific genius) redresses the balance — as he has many times before, having been the first Isher emperor and, later, founder of the *Weapon Shops* and,



through the years, balancer of society. (It's fun watching Hedrock rush around from place to place trying to keep the whole world running smoothly.)

The stories both maintain van Vogt's breakneck pace throughout — *something* happens every few pages — and probably are some of his best writing. (Who can forget two novels that end with super-alien, having examined Hedrock, leaving the *Galaxy* forever with the words "This much we have learned. Here is the race that shall rule the sevigram." or with the line, "He would not witness but he would aid in the formation of the planets.")

Naturally, it also contains some really clunky writing. For one thing, van Vogt knew virtual-

ly no science, but had a knack for coming up with marvelously meaningless words that sound just right. So when he slipped up and tried to be too concrete, his pseudo-science was all too obviously pseudo. (Like talking about teleportation by means of a vibrational device. *Stop snickering.*)

These are marvelous books!

Rating: ☆☆☆☆

The Rampart Worlds 1:

Perseus Spur

By Julian May

HarperCollins Voyager, 1998

310 pp., \$16.99



The Rampart Worlds 2:

Orion Arm

By Julian May

Del Rey, 1999

378 pp., \$6.99

This is fine space opera, but it rises no further, and is a disappointment coming after May's excellent Pliocene Exile and Galactic Milieu books.

The books are set about 200 years from now, when humanity is spread across the stars and is dominated by The Hundred Concerns, huge companies that control everything, including the government. (The government seems to be some sort of vaguely sanitized fascism, with the Hundred Concerns legally being part of the government.)

Rampart Starcorp is in the second tier of companies and is bucking for the big leagues. Its interests in the Perseus Spur (a nearby arm of the Milky Way) are envied by Galapharm, one of the Hundred Concerns.

Asa Frost, estranged son of one of the founders of Rampart, is a beach bum on a dead-end world when a giant snail eats his house and narrowly misses eating and killing him, as well. Asa learns that this was no accident and is pulled back into the intrigues among the Concerns.

There is considerable to-ing and fro-ing, blasters blast and FTL spaceships swoosh and plotters plot and a good time is had by all — I won't bother detailing the plot since it doesn't matter a whole lot.

It's good fun, there are some interesting places depicted as well as an *entirely* implausible human society and the good guys win in the end.

Both books were fun to read.

Rating: ☆☆1/2

Infinity Beach

By Jack McDevitt

HarperPrism, 2000

435 pp., \$25.00

Jack McDevitt seems to be an unreliable writer — some of his work is very good, while other pieces miss the mark. (I think particularly of *Ancient Shores*, which started out superbly, but wound down into a silly ending.) This is one of his better ones.

The story is set a thousand or so years hence. An interstellar drive exists, and there are thriving colonies on eight extra-solar planets. But Man appears to be alone in the universe — after centuries of exploration, no life more complicated than prokaryotic bacteria has been discovered off Earth.

This fact has had a terrible effect on Humanity, and people are in some ways just giving up. Exploration has been curtailed, though it's not yet dead, and populations are shrinking on some of the colony planets. Greenway, on

which the story is mostly set, is a prosperous world, now fully terraformed, but even Greenway is stagnating.

Kimberly Brandywine, an astrophysicist-turned-fundraiser, works for the only organization on Greenway that still searches for aliens. She's good at fundraising and feels she's making a major contribution to SETI even if she's no longer doing science herself.

Her comfortable life is upset when she begins to search for the truth about why her 10-year-old clone Emily disappeared



many years before. The trail is long cold, but appears to be connected to persistent rumors of a ghost inhabiting an abandoned house in a wilderness area. The search is long and convoluted and takes her outside the law and into space and, ultimately, leads her to discover the long-sought alien civilization which is needed to revitalize Humanity.

The book is well done and the characters believable. The scenes with the ghostly presence are very scary, and the love interest is handled well, also. The idea that being alone in the cosmos would sap Man's vitality is first-rate and well handled.

I greatly enjoyed *Infinity Beach* and nominated it for the Hugo. But I have some quibbles:

My big gripe is that Greenway and its civilization is *far* too much like late 20th Century America with a few new gadgets. I can't believe that society would have changed so little. McDevitt tries to build a sense of history with a few nice touches like a monument to a revolution on Greenway that happened a couple of centuries before the time of the story, but generally he just doesn't come close. There is no sense of this being a distant planet in the far future. It feels a lot like Oregon.

A secondary gripe is that Kim's Institute's largest project is to set off a regularly-timed string of supernovae to create a signal visible to aliens in another Galaxy.

What's wrong with that? To start with, there is no other indication that Human technology is up to the job — McDevitt must picture stars as being a few miles across if he thinks that the humans' civilization he's described could manipulate them on that scale. Second, the idea that setting a supernova off every 60 days would be an obvious signal neglects light-speed. Since the stars themselves are light-years apart, there is no way they could be exploded so that they appeared to explode on a regular schedule except in one favored direction in space. In most directions, they'd appear to explode years apart. Finally, even ignoring that, since the space for hundreds of light-years around the supernovae has already been well explored, there is no chance of the project paying off in less than thousands of years, and millions of years off is more likely. Why bother?

Finally, the aliens are a bit ludicrous, but an author is allowed one absurd element, and it works pretty well.

Withal, recommended.

Rating: ☆☆☆☆

Harry Potter and the Goblet of Fire

By J. K. Rowling
Scholastic, 2000
734 pp., \$25.95

The fourth Harry Potter book is as good as or better than the earlier ones. It follows the same formula, but with a decidedly darker tone than the previous three: Lord Voldemort gets loose, and by the end of *Harry Potter and the Goblet of Fire*, the good guys are organizing for resistance to Voldemort.

It has all the standard Harry Potter things, it does them well, it adds the start of adolescence and the angst associated with puberty, and promises more (including some pretty black times) to come.



Rating: ☆☆☆☆

The Miocene Arrow

By Sean McMullen
Tor, 2000
416 pp., \$27.95

The Miocene Arrow takes place in a post-apocalyptic North America and is a sequel to *Souls in the Great Machine*, which I reviewed last issue. *Souls* introduced a world two thousand years after our civilization collapsed, leaving automated battle stations in orbit that destroy any large moving vehicle and anything electrical. Worse, inimical Cetazoids in the oceans set up a Call that sweeps across the land causing any large mammal

caught in it to walk in a trance toward the ocean and death.

There are some Callhavens where the Call is infrequent and in which strange human civilizations have rebuilt. *Souls in the Great Machine* dealt with the Australian Callhaven, where a brilliant librarian had reunited the country using a computer organized from enslaved human components performing the rote tasks of computation. Another Callhaven exists in the western mountains of North America, and the civilization there is an ancient patchwork of chivalric kingdoms where the aristocracy fight formal duels in tiny diesel-powered planes maintained by hereditary engineering guilds.

An Australian faction that is immune to the Call has discovered that the ancient battle stations are no longer working and sends agents to North America to destabilize the kingdoms and steal the aeronautical technology. Being immune to the Call, they gain power in several of the kingdoms, ultimately plunging the North American kingdoms into total, unchivalric war.

The story of the war is very well told, with the best scenes from the point of view of several young flyers who have been given their chance in what had been an exclusively aristocratic endeavor, by the huge toll the war has taken among the nobility. Several of the best characters from *Souls in the Great Machine* also make their way to North America to combat the agents. Ultimately two wars are being fought, one between the various American factions and another, secret war among the Call-immune Australian factions.

This is an excellent book and a fine successor to the first volume — I'll be looking forward with interest to the third.

Rating: ☆☆☆☆





Writers with Agendas

"So, why did you write the book?" is the common question.

"Because I had something to say," is the writer's obvious answer.

"A lecture then? A sermon? How about a book that's just for entertainment?"

At this point any serious writer starts tearing his or her hair out.

Don't get me wrong. There always have been writers who write "just for entertainment," in the sense that they just try to please the crowd and don't worry about anything else. Lord Dunsany had choice words for them in a 1918 essay called "Artist and Tradesman" in which he divided all writers up into those two categories and proceeded to say:

The first are the more numerous, the more rich; they are the rulers of the time. (I mean by tradesmen the men whose *inspiration* is money. To them I would say, "Try painting pieces of lead yellow and selling them in the street as gold bricks." Money can be made that way and it is money they need ... above all it is *more honest* to sell lead for gold than to sell stale phrases as thought, and false conventions as emotion. They are the men whose disinterested

purpose it is to "provide what the public wants" ...

But the artists are the ruler of the generations.

(*The Ghosts of the Heavside Layer*, Owlswick Press, 1980, p. 177)

Dunsany then goes on at some length about sincerity, originality, and other things that hardened hacks (the sort who proudly call themselves "professionals" but disdain the word "artist") get uncomfortable talking about. Well, Dunsany was an aristocrat, wasn't he, of the pampered Idle Rich Class, so do we have to listen to him?

Yes, I think we do. It's far better than listening to the Hollywood vulgarian who uttered the famous phrase, "Got a message? Call Western Union."

Dunsany again:

But the message of a work of art is too complex to be put into a few words or into a few sentences, or into words any shorter than the length of the work itself even if it is an epic. There are millions who would say of *Hamlet*, "What is it all about?" and expect to be told in half a minute what it took Shakespeare himself many months to write.

(p. 178-79)

Here we get into deeper waters. Dunsany has glancingly defined the difference between art and propaganda, which is what causes all the confusion about "message"

content in literature. Chances are, if you *can* sum it up in one or two lines, it's propaganda, not literature. Any real piece of art is a more complicated meditation on something. It is formed out of the author's attitudes, impressions, and life experiences, which is why, ultimately, pastiche writing (or sharecropping, or ghosting novels for celebrities) never produces anything that could be called art. Dunsany, for instance, is a very widely-imitated writer. I know. I've imitated him myself. Yes, you can learn technique from him (his use of irony, his wild metaphors, the rolling, poetic quality of his prose used to specific effect), but if you don't put this to your own purpose, and are instead merely content to imitate, then, by definition, you will fail in what you're doing, because you can't be Dunsany, who wrote what he did because of the circumstances in his life. You will instead grow up to be Lin Carter, which is not a fate I would wish on any aspirant.

Carter, as you probably know, wrote most of the bad sword and sorcery fiction published in the 1960s and '70s. He was content to just ape the forms of stories he'd liked, so that his work often seemed like a child's scrapbook of pictures clumsily torn from other sources. You could go through a Lin Carter story and say,

Rating System

☆☆☆☆☆	Outstanding
☆☆☆☆	Very Good
☆☆☆	Good
☆☆	Fair
☆	Poor

"Yes, that's a scene from *The Dying Earth*, and that's from Edgar Rice Burroughs, and that's from this particular Robert E. Howard story, only he bungled it in the retelling." Carter once commented that he wanted to "grow" as a writer and learn to "do" other writers. He could "do" Burroughs and Howard and van Vogt and Leigh Brackett (all in pale imitations of course) and late in life he was even learning to "do" John Norman — but he never learned to "do" Lin Carter, because he'd never developed any individual identity. The one thing no one will ever be able to do is write a Lin Carter pastiche. There's nothing there. You can only copy what he copied, because, quite bluntly, Carter had nothing to say. He was a brilliant editor (of the Ballantine Adult Fantasy Series), but as a writer he simply lacked the creative spark. He tried to pass off painted cardboard boxes as gold bricks.

Any writer worth a damn has an agenda of some kind. It may be purely an aesthetic one, as was the case for Dunsany or Lovecraft. Usually a purely political agenda will push ideas in front of other considerations and be the death of art. Dunsany could be quite bad when he turned to preachments, as he occasionally did in later years. Or think of the later Wells, who, after about ten brilliant years in which he made himself immortal, threw it all away for a pot of propaganda. Similarly, B.F. Skinner's *Walden Two* or Edward Bellamy's *Looking Backward* should be read as non-fiction tracts, not as novels, any more than Plato's dialogues are really drama. They

may have merit in the ideas they express, but they lack the emotional complexity of art.

This is not to say one can't be entertaining. Since the beginning of time, writers have had to be entertaining, or else, at the very least, they didn't get fed. But the idea that a story can (or should) be "pure entertainment," devoid of any other purpose, is quite a recent one, dating, I suspect, from the dime-novel era at the earliest. Certainly the Ancients or Medievals wouldn't have understood it. As far as they were concerned, a work of art worth writing down (laboriously, on expensive materials) had to be more than that. Even when writers thumbed their nose at the ostensible high moral purpose of it all — as in Apuleius's *The Golden Ass*, which follows the literally age-old strategy of piling one racy episode on top of another and then justifying it all by having the character reform and get religion in the last chapter — they were achieving another purpose, which was effective satire.

A writer writes because he has something to express. It may be an idea, an emotion, or a whole series of ideas and emotions, but it has to be *something*. James Blish put it well. I haven't found the precise source of the quote — I am sure it's one of the William Atheling books — but George Scithers used to use it on his rejection slips, back in his *Isaac Asimov's SF Magazine* days: Science fiction must have content. It must be about something.

I don't find books that aren't about anything very entertaining.

The Telling

By Ursula K. Le Guin
Harcourt, 2000
264 pp., \$24.00

I have to confess that I had a really subversive, critically incorrect thought while reading this book, the latest in the author's Hainish Cycle, which has given us such classics as *The Left Hand of Darkness* and *The Dispossessed*. I said to myself, "This is like *Star Trek*, only better written."

Whoa. I'm not supposed to think that. But I keep coming back to these *Star Trek* alien societies consisting of people in jumpsuits with funny noses and an attitude. They aren't nearly as alien (or nearly as complex) as most societies on Earth. The alien landscapes look like sound stages with a few papier-mâché rocks, or else like southern California.

The one thing we know about extraterrestrial life is that if we ever go to the stars and find other intelligent species with technological societies, they and their world will not be exactly like us and ours. There will be, inevitably, strangeness.

Now Le Guin's Hainish series hypothesizes, exactly as does *Star Trek*, that somebody, millions of years ago, seeded most of the planets of the nearer stars so that, yes, indeed, there *are* human beings "native" to them (with or without jumpsuits and funny noses), which would imply that the entire biosphere of each of those planets is more or less like Earth's, too. It's just *too* obvious that human beings evolved alongside other Earth creatures. That's why you and I have many of the same features as a horse or a lizard. (You know:

two eyes, nose in the middle with two nostrils, mouth, teeth, tongue, heart, lungs, intestines, four limbs ... the same design gets repeated over and over again.)

I have to admit that, as beautifully written as Le Guin's Hainish novels are, they've never quite convinced me. These are supposed to be alien worlds, societies which evolved without any contact with Earth, yet there is a truly distressing lack of strangeness in *The Telling*.

Here is a description of a city on another world, seen for the first time by an Earth-woman:

The modern buildings — prison, district and civic prefectures, agricultural, cultural, and mining agencies, teachers' college, high school — looked like all such buildings in the other cities she'd seen: plain, massive blocks ... The rest of the city was small, subtle, dirty, fragile. Low house walls washed red or orange, horizontal windows set high under the eaves, roofs of red or olive-green tiles with curlicues running up the angles and fantastic ceramic animals pulling up the corners in their toothy mouths; little shops, their outer and inner walls completely covered with writing in the old ideographs, whitewashed over but showing through with a queer subliminal legibility. Steep, slate-paved streets and steps leading up to locked doors painted red and blue and whitewashed over. Work yards where men made rope or cut stone. Narrow plots between houses where old women dug and hoed and weeded ...

(p. 55)

Sounds like someplace in Asia, doesn't it? Lhasa?

Now, to be fair, *The Telling* takes place in a purely human society (no funny noses here, no pointy ears or green blood), but somehow this society does-

n't seem to have had any original ideas of its own. Every image, institution, or device can be found on Earth. There are hotel rooms with chests of drawers in them, steamships, helicopters. The dominant government, the Corporation, is very much like contemporary Communist-Capitalist China, aggressively modernistic, bent on wiping out the old ways and the old religion, which is (as should come as no surprise to Le Guin readers) basically Taoism. One thinks of the suppression of the Tibetans and of Falun Gong.

Our heroine, who comes from an Earth that recently freed itself of religious fundamentalist tyranny, is sent as an observer by the Ekumen to this world of Aka, where she rapidly discovers that the old, beautiful ways are still very much alive, hidden under the surface of Akan society. She notes the irony that on Earth religious zealots were the oppressors. Here, it is anti-religious zealots doing the same thing, with the additional irony that the upheaval in Akan society may well have been caused by missionaries from Earth. She escapes to the Akan Shangri-La, a mountain-top fastness where all the ancient, banned books of the earlier culture are preserved, gains wisdom, has debates with her nemesis, an official of the Corporation, and may well have saved the day at the end by making it clear that the Ekumen is interested in all these ancient texts, so maybe the Akans should not destroy them.

It's all beautifully and sensitively done, all very vivid. You feel that you've been there. Le Guin has a wonderful sense of the everyday textures of a

place. She gives us a wonderful description of a provincial city in a foreign country, but I was never for an instant convinced this was on another planet.

I think the way to read *The Telling* or, for that matter, *The Dispossessed*, is to forget about outer space altogether. The whole interstellar setup of the Hainish universe is a creaking space-opera convention that really does not work. These books are part of the utopian tradition. They are thought-experiments set in a place you can't find on any map. Aka is a strange land on Earth, actually located, I think, somewhere east of Graustark but west of Islandia, in the vicinity of Omelas.

When you get there, you will find that Ms. Le Guin has a worthwhile story to tell, filled with very real characters, and concerned with substantial issues that, to her, matter very much. That is what we ask of any novelist.

So, recommended with reservations. At least it's about something.

Rating: ☆☆☆

Household Gods

By Judith Tarr
and Harry Turtledove
Tor, 1999
508 pp., \$27.95

This is a book that Fletcher Pratt wanted to write. His colleague, the late L. Sprague de Camp, describes its origins thus:

When he had finished *The Blue Star*, Pratt told his friends that he planned a third fantasy novel. The chief character, he said, with shrewd self-judgment, would be a woman, "because I've learned that my female characters are stronger than my male ones."

This woman, finding her modern life hard, would wake up in the body of another woman 1800 years ago, on the German frontier of the Roman Empire. There she would learn what real hardship was.

(*Literary Swordsmen and Sorcerers*, pp. 192-193)

We can't know how Pratt would have done it, because he died before ever making the attempt, but I certainly suspect that his version would have been different. It *could* have been a "spoiled, uppity woman learns better" story, though I should hope not. Certainly with a female co-author, *Household Gods* did not turn out that way.

Otherwise, Tarr and Turtledove have followed Pratt's plan very closely. We meet Nicole, an attorney with two small children, divorced, trying to collect from her dead-beat husband, cheated out of a partnership in her firm, losing daycare service for the kids ... and as frustrations mount she rather carelessly offers a prayer to an ancient Roman plaque of the god Liber and his consort Libera, a souvenir from her unsatisfactory honeymoon in Austria ... and those gods, not having been prayed to in some centuries have nothing better to do ... so, presto! Nicole wakes up in the body of her ancestress Umma, a widowed tavern-keeper (with two small children) in Carnuntum, a Roman city on the Danube in the 9th year of the reign of Marcus Aurelius (A.D. 169).

The unbelievable thing about all this is not the miracle, but that Nicole, even if her sole knowledge of Roman history comes from sword-and-sandal movies (or *especially* if it does!), could somehow believe that women were

treated better back then, that sexual equality existed in the ancient past. She somehow doesn't know that the Roman Empire, even at its best, was a pretty brutal and bloody place. When she hears that there's a beast show at the local amphitheater and thinks it's some kind of traveling zoo, I can't help but feel that Nicole is a bit of an idiot.

But I suppose it is believable that even an educated American could be that historically illiterate. She rapidly learns better. It becomes a clear case of "be careful what you wish for; you might get it." The book becomes very convincing indeed. There are points of historical reference here that sent me to the books to discover I was wrong and Tarr and Turtledove were right. More important, we get a very good sense of the texture of ancient life, where hardships range from 2nd Century dentistry to barbarian invasion.

And, in a larger context, the book is an interesting addition to the dialogue that's been going on in our field ever since Mark Twain wrote *A Connecticut Yankee in King Arthur's Court*. What can a person from the future, thrust into the past, hope to accomplish? We've had a lot of books on this topic, from Twain, to de Camp's *Lost Darkness Fall*, to Connie Willis's *Doomsday Book*. Would the time traveler transform everything or just be hard-pressed to survive? Tarr and Turtledove's heroine manages to introduce a recipe for cinnamon-baked apples and teach a few people to boil water, but that's about it. She has to devote most of her time to pretending to be Mistress Umma, whom everyone else in

the story knows, gleaning from them details of family relations, habits, names, etc., trying to avoid too much culture clash. She is not a stranger arriving in a large city like de Camp's Martin Padway, nor do the authors let her perform a dozen industrial miracles before breakfast the way Twain does with Sir Boss. She's stuck in the tavern. She learns about life, love, and death. She even gets an audience with the emperor, but history is certainly not changed. Eventually Nicole returns to the 20th Century, and applies what she has learned to her old problems. She's become a stronger and better person.

Again, here's a book with an agenda. The authors may have started with Fletcher Pratt's notion, but they've put into it their own ideas and feelings and made it a book *about life*, and it rings true.

Rating: ☆☆☆☆

The Road to Mars

By Eric Idle

Pantheon, 1999

309 pp., \$24.00

This one, I will admit up front, disappointed me because I'm not sure it really *is* about anything. It's not that the author has nothing to say. Idle, who is that same Eric Idle who was once part of Monty Python's Flying Circus, has much to say about the nature of comedy, most of it put into the words of Carlton the Android (following movie/tv usage of the word, a humanoid robot, who looks like David Bowie), who is trying to write a thesis about comedy. Carlton works for Alex and Lewis, a Laurel-and-Hardy-like pair of comedians who struggle through second-rate gigs in

the outer Solar System while trying to reach the big time on Mars.

It's full of zinging one-liners, this convoluted spectacle of a science fiction novel, very much in the Douglas Adams mode. There is intrigue, betrayal, much satire on showbiz ... but not a lot of heart. In fact, the book reads like a screenplay in prose — and would make an entertaining movie with the right cast, maybe Robin Williams as Alex, who is the short, frenetic one — full of clever dialogue, but without much description (that to be filled in by the special effects people) or without the characters having much life to them (to be filled in by actors).

Alas. Idle is obviously an intelligent and very witty fellow. He has clever ideas. But this doesn't really work.

Rating: ☆☆

Impossible Encounters

By Zoran Zivkovic
Publishing Atelier
Polaris, 2000
131 pp. \$15.00

Zoran Zivkovic is one of the very few contemporary Serbian SF writers being translated into English. You have perhaps seen some of his work in *Interzone*. So far, nothing of his has been published in the United States. His English-language books that I have seen so far — *Time Gifts*, *The Fourth Circle*, and *The Writer* — have all been printed in Belgrade, more, I gather, as samplers to impress Western publishers than as items of commerce. However you can order them through the mail, and they're of considerable interest. They're all nicely produced paperbacks with surre-

alist paintings on the covers.

I can say nothing about Zivkovic in the context of other Serbian SF, because I haven't read any other Serbian SF, but out of any such context he's still a very good, often first-rate writer. He is fond of assembling short, almost anecdotal stories into books like this one, where each gives the others increased meaning. The eerie atmosphere is deftly built up through small details. Metafictional tricks follow. The book *Impossible Encounters* is in each of the stories, which involve a vision of the afterlife, a man's encounter with his older self on a mountaintop, and an alien who must erase what the author is writing to avert cosmic catastrophe, not to mention ironic tangles with both God and the Devil. It's not science fiction in the Western sense, but more fantasy of the Borges sort, with maybe a touch of Philip K. Dick. In the last episode, the characters from the earlier ones gang up on the author, and the "real" and the imaginary are transposed.

Recommended. (Order from Publishing Atelier Polaris, Bulevar Mihajla Pupina 10E/162 11070 Belgrade, Yugoslavia)

Rating: ☆☆☆☆

Lord of a Visible World:

An autobiography in letters

By H.P. Lovecraft,
Edited by S.T. Joshi
and David E. Schultz
Ohio University Press, 2000
385 pp., Cloth: \$49.95,
Paper: \$24.95

This one's a little pricey, but definitely worth it. Joshi and Schultz have made another major contribution to our understanding of one of the

most important writers in our field. It also seems that Lovecraft was one of the most self-documented (and documented by others) literary figure of all time, in addition to being one of the world's great epistolarians. This fat volume represents, of course, only a very tiny percentage of the total output. The editors disabuse us of the common claim that Lovecraft wrote more than 100,000 letters. No, it may have been only 75,000, and many of them brilliant informal essays and memoirs, a few of them the length of short books. The present arrangement, which is re-edited from the five volumes of the *Selected Letters* and from manuscript sources, including passages and whole letters never before published, assembles an autobiography, through which we see the development of Lovecraft's personality, his aesthetics, philosophy, and politics ... and the Old Gent comes across as our brilliant, eccentric friend who has unfortunate lapses ... the sort of guy who could write of New York City after having lived there as "the dead and lovely old city that was; the gracious and glamorous elder New York ... which lies stark and horrible and ghoul-gnawed today beneath the foul claws of the mongrel and misshapen foreign colossus that gibbers and howls vulgarly and dreamlessly on its site."

But, seriously, Lovecraft's letters are among the world's great personal/literary documents, comparable to the diaries of Samuel Pepys and perhaps destined to stay in print as long.

Rating: ☆☆☆☆



Extreme Futures



You can't predict the future. Oh, you may have a pretty good shot at peering over the horizon and successfully speculating about tonight's dinner, or figuring that within the next 12 months you'll need a haircut or will have to fill up your gas tank a few times. Of course, even those predictions can't be 100% guaranteed. Prior to tonight's dinner you might snack on a bad batch of cheese dip and have an allergic reaction that not only makes you too sick to eat dinner, but is so severe that it causes you to lose your hair permanently (therefore no more haircuts) and messes up your inner ear, so distorting your equilibrium that the doctor says you can no longer drive your car (and therefore no gas requirements). So there you go — not even a sure-thing future is completely sure.

So what chance do any of us have of making long-term predictions, those that reach hundreds or even thousands of years into the future? I don't recall George Washington predicting the development of the Internet or the Pokémon fad. And dig as deep as you want, and you will not find Isaac Newton predicting a single word about analog cellular phones being replaced by digital cellular phones during the first few years of the 21st Century. But you don't even have to go back that far. Head on up into your parents' or grandparents' attics and thumb through that moldy pile of *Life* and *Look* magazines from the 1950s for a look at the wonderful world that was supposed to be the end of the 20th Century.

I don't have a flying car.

Intelligent highways don't zip me to work.

There are no human bootprints on Mars.

My robot butler did not bring me coffee this morning.

Nowhere in the grocery store can I find a three-course meal in a pill.

My doctor insists that there is no cure for the common cold.

Predicting the future is easy — the hard part is getting it right.

Well, I am not about to slip my neck into the noose and let the future kick the chair out from under me by making my own predictions look like pathetic jokes.

But I'll let you in on a little secret. Getting it right or wrong is not what the future-predicting business should really be about. A list of future events should be viewed as a list of *possible* future events — those both good and bad — potential pictures that we can strive for, or do everything in our power to avoid. Thinking about the future can help you create the future that you desire. If you don't peer into the future and attempt to guide events to create the world you want, then you will just be stuck with whatever comes along whether it is a planetful of talking apes, plague-ridden survivors digging through the rubble in search of dog food, or a terraformed Mars; you will just find yourself there, surprised, confused, and probably totally bewildered by how history has taken such bizarre twists and turns.

The future is rarely what we think it will be, because we don't let ourselves go, don't let our imaginations run wild. But of course there are limits. I would not speculate about a future in which magic is discovered, or trees spontaneously achieve self-awareness, or the United Nations grants human rights to Nike sneakers. Those are reserved for the realms of an imagination screaming full-tilt out of the territory of the bizarre and

finding itself firmly in the land of "no-damn-way." What is useful is to take a look at the border between those two regions, to take a look at the edge of what is just possible. This gives you some sense of where the line is that can't be crossed, and also lets you know just what amazing things might be possible. When peering at this boundary, the only constraints that you should recognize are the physical limits that the universe itself imposes on us — break no laws of physics. I like to call such futures *extreme* — those that exist at the edge of what is *just* physically possible. When constructing an extreme future you will discover that there is far more possible than you had ever imagined.

Human population

This is a topic that has concerned mankind for hundreds of years, and rightly so. A combination of too many people and not enough resources can be a deadly mix, condemning billions to lives of pain, poverty, and starvation. We currently sit at a global population of 6 billion people. Those whose job it is to peer into the population crystal ball often see a dismal future, one in which Earth's population may double or even triple in the next hundred years, resulting in global disaster, complete eco-collapse, world-wide war, super-plagues, and the rationing of everything from food to water to fuel. These "futurists" will have you believe that 6 billion people put us close to the carrying capacity of this planet. And any reasonable person would have to believe that. Billions are already malnourished, living in horrible poverty, and many hundreds of millions at

any given time are actually starving.

So just how many people can this world handle?

What are the constraints?

From the most fundamental perspective, there are three main constraints limiting Earth's carrying capacity: food, space, and water. Without the minimum required amount of any of these three critical items, then people will suffer, and, as we've seen, will die.

But just what is this world really capable of handling? (Remember that I am not painting a picture of what I think the future will be, or should be — simply one that *could* be if you looked at the extreme possibilities.)

Food

Food is not a Big Mac and a side of fries. Food is energy, little more than chemical bonds that the machinery of your body breaks down, transforming a portion of the energy in those bonds into the various substances that your body needs to live. To keep a person in good working order, a healthy body will thrive on 3,000 Calories a day. Now you may think of Calories in terms of how many slices of chocolate cake or chicken nuggets or carrot sticks you can consume — but there is a much more fundamental way of looking at it.

Calories are a unit of energy. It is instructive to convert this number into something that is more energy-familiar to us. 3,000 Calories is equivalent to 4 kilowatt hours. This is the same energy needed to burn four 100-watt light bulbs for 10 hours. That's it. You could nicely meet the daily energy needs of a person by providing them the energy consumed in the operation of those four light bulbs during 10 hours of operation.

The trouble is, you can't plug a person into a wall socket. We aren't built that way, and therein lies the heart of this food situation problem. You see, we eat sunlight. But before it comes to us, it has to go through several middlemen who first take their cut. Plants use sun-

light to grow. Most of that sunlight is used in keeping the plant alive, with only a small fraction of it used in the production of foodstuff (remember that once you reach adulthood and stop growing, those 3,000 Calories a day are needed just to maintain you — there is no extra that goes into the production of an extra arm or leg which is occasionally harvested to feed some animal further up the food chain). We can eat the extra mass plants produce. Or if we want to be really energy-inefficient, we can feed those plants to another animal, let them use the bulk of the energy in those plants just to maintain themselves, with a small fraction of it going to grow the meat that we will eventually consume.

This whole situation is extremely inefficient. What we need are humans who can directly "feed" off the incoming sunlight, in the same way that plants do. Before we figure out what such a person would look like, how a person could directly feed off light, we should see just how much energy the sun provides this planet.

When the sun is up, it delivers 1 kW/m². This means you can imagine that every square meter of real estate has ten 100-watt light bulbs burning over it. The Earth has a surface area of 5.1×10^{14} m² (that is 51 followed by 13 zeros). If we assume 12 hours of sunlight a day, then the sun delivers a total of 6.1×10^{15} kW-hr to this planet. Now we know that each person needs 4 kW-hr per day of energy, so how many people could this planet support, if all the sunlight striking Earth were used in the feeding of the human population?

Total Number of people = $6.1 \times 10^{15} / 4 = 1.5 \times 10^{15}$ people

Right now, with 6 billion, or 6×10^9 people, we seem to be right at the limit of how many people can live on this planet. And yet if we look at an extreme future, in which all the incoming sunlight is used to feed people, this planet could support a population much greater than the one we currently have — one larger by a factor of

$1.5 \times 10^{15} / 6 \times 10^9 = 250,000$. From an energy perspective, this planet could handle 250,000 times more people than are currently living on it.

How would this actually work? It's not all that hard to imagine. If I peer a hundred years or so into the future, once mankind has full control over the human genome, it would not be all that difficult for each person to "grow" a solar-cell array, something that might resemble a bushy growth coming up from their shoulders. If each person requires 4 kW-hr, this could be provided with a solar-cell array of 1 m² exposed to incoming sunlight for 4 hours a day.

Now this is without a doubt "extreme." In this vision of the future I have assumed that these sun-eating people can populate every square meter of the planet. That of course includes the surface of the oceans (3/4 of Earth's surface area) and some pretty inhospitable chunks of land, ranging from frigid Antarctica to some mighty hot and dry deserts. And, of course, this leaves absolutely no energy for other plants and animals. But that doesn't make any difference. What is important to realize is that when experts tell you that we are right at the edge of the carrying capacity of this planet, they are simply wrong. We may well be at the edge in terms of *today's* technologies, but in the extreme, this planet could probably support anywhere from 10,000 to 100,000 times more people than it currently has.

And this is just using sunlight as our energy source.

When fusion energy becomes possible in the next half-century or so, and then later, perhaps the total conversion of matter to energy, then energy, or "food," will never be a population limiter. If you could convert mass directly to energy, just how much mass would those 1.5×10^{15} people need each day? We know courtesy of Einstein that $E = mc^2$, where E is energy, m is mass and c is the speed of light. Knowing that we need 6.1×10^{15} kW-hr for all these people, we can use Einstein's equation to determine that each day a mass of 240

tons would have to be converted into pure energy in order to feed them. That is nothing. The sun itself will be long dead before you could put the slightest dent in consuming the Earth. Now, of course, for you non-extreme sorts who would like to maintain our currently small population of 6 billion, this would only require the conversion of a bit over 2 pounds of mass a day.

Bottom line: food (i.e., energy) does not represent a limit on the number of people this planet can support. What limits us today is that we cannot harness this abundance of energy.

Space

What we saw from the above is that if we rely on the solar energy only solution for food, then we may run into a surface area limitation. There is only so much room on Earth for people to be sunning themselves. If we move to fusion power, or the ultimate complete mass to energy approach, then we could support far more than the 1.5×10^{15} people described above. However, we still have the problem that people take up space.

Again, let's look at some extreme scenarios. Instead of having people spread out all across the planet, as we do now, let's gather them all up and have them live in a really large building.

One building for the entire human population.

For purposes of this example, let's assume a total population of 10 billion people. Just how big would this building have to be? Well, that, of course, depends on just how much volume each person needs in this building. Furthermore, I will assume that our building can be no higher than 1000 meters (about 3,000 feet) — about twice as high as current world record skyscrapers, but something that should be easy enough to construct in the coming century. Let's think of a square building. How big would its base have to be, if we assume that 1000-meter height? This chart shows the building's dimensions as a function of how much space each person requires.

Vol/person (m ³)	Total Volume (m ³)	Building base km x km
10,000	10 ¹⁴	330 x 330
1,000	10 ¹³	100 x 100
100	10 ¹²	33 x 33
10	10 ¹¹	10x10
1	10 ¹⁰	3 x 3
0.1	10 ⁹	1 x 1

You may not be familiar with thinking in terms of m³ or of living space in terms of its volume. But let's assume that a family of four can comfortably live in a home with a floor space of 2000 square feet, in which the ceilings are 9 feet high.

This represents a volume of 18,000 cubic feet, which is equivalent to 667 m³. This comes out to 167 m³/person. If we make the assumption that for every 1 cubic meter of personal living space another 6 m³ of public space is needed (hallways, shopping, parks, transit systems, and manufacturing facilities), this means that each person is allotted 1000 m³, and that those 10 billion people could live in a building with a base of 100 x 100 km². This is only .05% of the Earth's surface area, and only .2% of its land area. That's it. Housing everyone in this one building would permit 99.8% of the Earth's land area to be *people free*.

And this is a conservative approach. If we go to the extreme, I could imagine a world in which people have been reduced to their brains and are physically hard-wired into a virtual world which has absolutely no physical limits. How much volume would such a brain require? 0.1 cubic meters would do nicely. In this case, you would not need all that additional overhead space (forgive the pun), since these brains would never leave their cubbyholes. Therefore, those 10 billion could be housed in a building with a base of only 1 km x 1 km. And if you want to look at the extreme, imagine that the population swelled to one that was one million times larger. The building would then have a base of 1000 x 1000 km. A massive building, to be sure — occupying a good-sized chunk of the middle of North America. But that's all. Even that

extreme building would occupy only 20% of the Earth's land area.

So space does not appear to be a real limit.

Water

As we've seen, at the extreme edge, this planet could easily support a million times more people before food and space became a real problem. The only missing necessity for human life is water. For many on Earth, drinkable water is in short supply. Before resorting to such extreme solutions as the mining of comets, or draining the seas of Europa and transporting them back to Earth, we should first take a look at the available water already on this planet.

This is a water world. While the vast majority of that water is seawater, and not considered drinkable by most people, that is simply not the case. We do not have to wave some far-future science wand to make seawater drinkable. Reverse osmosis desalination plants can do the job quite nicely. All that is required is the money to build and operate them. Many oil-rich Arab states have opted for such solutions in their otherwise water-deprived nations. In an extreme future it is not too hard to imagine that seawater can be made drinkable.

So, just how much seawater is there? The world's oceans cover an area of 3.5×10^{14} m² and have an average depth of 4,000 m. This represents a total volume of 1.5×10^{18} m³. This is an almost unimaginable volume of water. The largest reserves of fresh water currently reside in the Antarctic ice cap, which in some places is more than 3 km thick. To make a comparison, if the Earth's oceans were moved to the continent of Antarctica and

frozen, how thick would the cap then be?

100 km high.

This would be a continent-spanning chunk of ice reaching right up into low Earth orbit (of course, it would be unable to support its own weight and come crashing down on itself). If we look at an extreme future with one million times more people than this world currently holds, how much water could each one of those people call their own?

$$\begin{aligned}\text{Water/person} &= 1.3 \times 10^{18} \\ \text{m}^3/6 \times 10^{15} \text{ people} &= 216 \text{ m}^3\end{aligned}$$

This is a huge amount of water. An average bathtub hold 1 m³. If you drink the eight big glasses of water you are supposed to each day, it would still take you almost 30 years to drink 216 m³ of water. But of course, this water does not get used once and then disappear off the face of the planet. It gets recycled, either through the natural water cycle of the planet, or in the case of our big building, through machine-based recycling systems. And for those of us today, for the mere 6 billion who live on this planet, each and every one of us could lay claim to 216 million m³ of water — that would be a chunk of ocean from its 4 kilometer ocean-bottom depth right to the top, with a surface area of more than 200 x 200 m². Water is not an issue in our extreme future.

Conclusion

When considering food, space, and water, there are no physics-related limitations why this planet could not support one million times more people than it currently does. So what does that mean, in light of the fact that so many of Earth's 6 billion are barely surviving, and that some of them are not surviving at all? It means that we have not yet learned how to harness the resources at our disposal, and that near-future technical innovations (over the next few centuries), when in hand, could not only provide an abundance for everyone currently on this planet, but also provide for many, many, many more. The

main point to take away from this *extreme* perspective is that the future is not hopeless, but full of hope. If we choose to, we can solve the problems we face. We have the resources, so all we need to do is focus our brainpower on the solutions.

As I said at the beginning of the column, these extreme futures are not my attempt to predict the future, merely thought experiments to show where solutions might lie to help address our current problems. Do I think that in some distant future there will be one million times more people on this planet than there currently are?

I really doubt it.

I don't even see ten times more. As a matter of fact, I see far fewer than we have today. Despite the fact that the Earth's population continues to grow, the growth is very uneven, divided along lines of economic abundance/high education levels, and economic deprivation/low education levels. The purposes of large families are complex, but two of the bigger drivers are the necessity of having sufficient children to work family agricultural land, and the need for enough offspring so that those who reach adulthood can help support parents as they grow old and can no longer work. These considerations are no longer very important among many of the economically advanced and highly educated populations of the world. As a consequence, many countries in Europe are actually experiencing population declines.

If economic and educational levels can be raised sufficiently throughout the world, it would not be hard to imagine that such population declines would be experienced across the world — this would not be an overly *extreme* perspective. If we assume that during the first half of the 21st Century world population peaks at 10 billion and then starts to slowly decrease, at a rate of only 2%/generation (where a generation is 20 years) — a rate of decrease far less than that which many European

countries are now facing — what would be the consequences?

At first they would be negligible. After one hundred years (5 generations), the world population would have been reduced to 9 billion. But like compound interest, what starts off slowly will eventually have a much larger impact. The table below shows just what will happen in a future in which the population slowly decreases at a rate of only 2%/generation.

Generation #	Population
0	10 billion
5	9 billion
10	8.2 billion
25	6.0 billion
100	1.3 billion
200	175 million
500	410 thousand
1000	17

In one thousand generations, which is only 20,000 years, mankind would be as good as extinct. And this is with only a 2% population drop every 20 years, or a mere 0.1% per year. For significant population decreases, with drops of 1% per year, Earth would reach the sub-100 people level in a mere 2000 years. Such a future, I believe, is no more *extreme*, and in fact much more likely, than any of those in which countless billions are stuffed into monster buildings.

Not one to make bold predictions of the future, I would still be willing to take the risky position that within the next few thousand years, the human population will end up somewhere between 0 and 1x10¹⁶. Of course, the actual number will depend on the choices we make and which extreme futures we build for ourselves. □

Reality's Real Estate

By Denise Lopes Heald

Art by Jael

Parrots flapped purple wings in the sun-dappled tree canopy above, and their barks, muted by humidity and insulating foliage, grated on Martella's raw nerves. Ducking dangling tree limbs, she waded into knee-high grass. White blossoms and finger-length red caterpillars rained on her head. Ivy tendrils tripped her, and something soft and warm brushed her bare ankle. She cursed. If Jon weren't her boss ...

At the mansion's gate, she swiped sweat from her eyes. She had flown out here over city estates, but now, bathed in steaming sap and moldering wood scents, she felt as if she were lost in deepest wilderness. Not a human thing stirred in this patch of woods except herself. She didn't count the Client.

An SCH for a client? She held her breath as the thing — tall and massive in its Self-Contained Habitat armor — slid from its seat on the cargo rack of her Reality Realty skimmer. Thank her fates this client wouldn't fit inside the skimmer's passenger slot. Late afternoon sunlight glinted off the SCH's mirrored faceplate, and she thought, *Damn you, Jon*, as her stomach nudged her throat. She had updated her will before leaving the office and given Jon's secretary her credit tab for Annie, just in case. She trusted the SCH's controlling Judgment-comp to knock out its human inhabitant before it killed her about as much as she trusted her boss in a dark room.

"How long have you been out?" Her voice shook as she fed Realty Net access codes to the estate gate's security system. She was an idiot to try conversation with a machine animated by a mind that could only be insane.

"Out?"

The SCH's projected voice rumbled in a distinct bass. Apparently, it — or its vocal cords — had been male once.

"Out," it said again. "Out of the Corps?"

What else? "Yes."

"I've been independent for three years."

David hadn't lasted two weeks. She flinched, and the gate popped open beneath her weight.

The Client slid past at her back, crunching onto a gravelled footpath. Overgrown hedges, blue-leaved vines, and clawing berry canes crowded the track on either side.

"The state never maintains landscape." She swatted a cloud of pestering gnats and tried to smile. "I'm sure the house is in better condition."

A gnat flew up her nose. She sneezed. The SCH's blank faceplate stared at her. She refused to scream.

"The asking price here is 1.4 million mil." She had never shown a property even half this expensive before. Her clenched jaw ached.

"I want to look outside first." The SCH waved at the towering old-growth haisop trees and droopy umbrella pines.

Relief pimpled her arms. "I'll just go ahead, then, and open the house for you."

The SCH turned back to her. "They call me Aegean."

"Aegean?" What did she do with that? "Yes ... take your time." She waved to the surrounding green.

The SCH stepped into head-high — its head — growth. She started up the path. Gravel scrunched beneath her soles and bruised her feet. What a desperate idiot she was to be out here alone with it. The SCH could be stalking her ...

But it didn't need to stalk her to catch her. She was being ridiculous. Well ... everything was ridiculous, and if she didn't sell something soon, things would get even worse. She couldn't bear uprooting Annie again, this time dragging a 10-year-old into some slum rental. Hell, she would be lucky to afford a slum the way business had run lately.

So she took this SCHit for a showing, rather than lose her job, when no one else in real estate on this planet would show such a client their office. Long odds, big profits, David used to say. *Damn you, too, David.*

An ebony millipede the size of a small log slithered across the toe of her shoe. Great yellow eye spots stared from its sides, and shin-threatening red spikes wobbled on its back. Her heart thumped. But the thing disappeared into the grass before she could jump, let alone scream. She breathed deep and went on, hating everything wormy in the universe, hating sweat and fear, exhaustion and loneliness. Her eyes stung. Her throat tightened. Scared, tired, lonesome? That was nothing new for her. The other agents' sniping, Jon's heavy hands, none of it touched her emptiness. She gritted her teeth and waded through a thicket of vines. Better to burn trying than let the office scuddies steal her sales and



bury her beneath their unloadable garbage. Just hold on. Jon had promised her a bonus for showing this wreck.

She stumbled at a thought. What if she did sell it? Commission on a million mil was ... Her heart misbeat. But if any of Reality's agents had seen a chance of half a point, they wouldn't have sent her out here with this thing.

She rounded a bend as the woods fell away behind her. To her right, water bubbled in a slime-covered fountain. Around it, the remnants of a circular lawn grew waist-high, and ahead ...

Her breath escaped from puffed cheeks.

The house was five stories of gray bulbs, knobs, bays, and crenellated balconies crusted with patches of lichen and bird squat. Palm vines writhed upward, wreathing every peak and point and strangling gargoyles and flagpoles. If any place suited a pardoned android war criminal, this one did.

She climbed the house's steps. Stone railings funneled her toward a stone veranda. She stared about, dwarfed by architectural scale. Not even her Client would ever buy this. No one would. Why did the SCH even want to see this thing?

She slipped on rotted leaves and braced herself against a handrail. Sweat dripped in her eyes. Sun-heated stone burned her palms. Her heart hammered.

Was her client — it/he — watching her? Why hadn't she waited and arranged to fly right onto the property? Hesitation, David said, meant lost courage. David hadn't hesitated.

She stepped onto the veranda and began coding the house security pad at the front doors.

"Would you believe it?"

The man's growl stopped her heart. She glimpsed him left and dived right ... slammed into a sweat-rancid chest.

"Now isn't she a pretty." Hands like power grips clamped her wrists and twisted her arms at her back. She stared up at a ragged beard, matted eyes, and rotted teeth.

"Who let you in?" She writhed.

"Us in?" His breath stank and his hairy face nuzzled her ear. "Why, we lives here, missy."

The man spun her about, and the first tramp strode toward them while more dark figures — in ragged bodysuits and stained laborers' vests — scaled the veranda's railing.

"Gots us a trespasser, eh, Mac?"

The tramps laughed. How had they gotten past the estate's security? Damn. Damn you, Jon.

She lunged. The man held her, grabbed and groped.

Unwashed bodies closed on her. Her jacket tore. The thighs of her pink skintight split, and teeth found her neck.

She screamed ... screamed louder. They

laughed. She fell, and the men's bodies suffocated her.

"Hey!"

Weight exploded off her. A man roared — panicked — and she was free. She blinked.

Client, his armor lead-colored in shadow, stood over her, holding two men by their vest collars. They pawed at the SCH's synthetic arms.

She scrambled back. Client grunted, threw his captives against the wall beside the other cowering tramps, and stood stiff as stone between her and the pack. Martella hugged scraps of her bodysuit against her breasts, with her heart thundering, and froze as stiff as the SCH.

"I found your sneakway." The SCH's projected voice crackled with static. "Leave now. I'm going to seal that hole; and if I find you inside afterwards, no one will ever find you again."

The tramps scattered. Her breath escaped and her heart thumped. Thank fate these fools were ignorant. Ashen-faced, round-eyed, they slithered past Client, skittered off the veranda, fled through tall grass — faster than the millipede she had seen — and disappeared into the jungle.

She sucked in a breath and crossed her legs so she didn't wet herself. Seconds passed. She waited.

The SCH relaxed ... and moved. If the tramps had known anything except horror stories about SCHs, they would have realized that when Client's armor went rigid, he was helpless to harm them. The SCH had been frozen down by its Judgment comp the moment he crossed the line from defensive action to assault by flinging them against the house. But of course, if they had tried to hurt her again, the J-comp would have released him, as it did now, with all threat vanished.

"You are hurt." Client knelt, not touching her.

"Oh. B-b-be all right. It's n-nothing m-much." ... Probably less than Jon would like to do to her. "You d-didn't g-give them a ch-chance."

"Here." Client slipped a first aid tube from a bandolier pocket and extended it on the SCH's open palm.

"Thank you." She applied sealant to her neck and her split lip and used the goo to stick her clothes back together.

"Brace yourself." Client straightened.

"Wh ..."

Boom! The air sucked in and out. Loose debris fell from the house, and a flock of birds chirped skyward.

She swallowed. "I hope th-that was real?"

"Just noise. But your friends' pants should be soggy."

"Oh." She breathed out. "Good." Had she really wished the tramps blown apart? Who cared? She laughed. What was she thinking ... with everything worst-state and scariest, she laughed? Well,

why be more scared of Client than anyone else?

"You won't hurt me?" She fought back tears.

"No." He spoke low and offered her a hand up.

David's synthetic fingers had looked identical. She grasped Client's hand and he lifted her to her feet.

"I —" She stumbled and bumped against the SCH.

At the contact, its chest armor softened, flushed with warmth, and cradled her.

Blinded by memory, she eased away from the SCH. "Sorry."

Client said, "We should go back."

"No." She tugged at her torn skintight. "I want you to see inside." She had to make this showing.

She coded the mansion's front entrance open, and they stepped through into an entry vestibule.

Fate hated her. Ropes, pulley benches, float chairs, and old-fashioned stairs hung, leaned, hovered, and spiraled from, against, and upward into an impossibly high, sun-streaked dome. Someone's crazy aunt had escaped her room and begun decorating here. Things happen in this house, the room implied, things unimaginable. Annie, Martella thought, would love this craziness, but Client would never buy it. The office crew must be rolling on the floor laughing at her.

Opposite them, a massive wooden staircase curved upward out of sight, and a brass handrail spiraled into tighter and tighter coils until it ended in a solid metal plate so far above them the house couldn't actually contain the entire structure. Head back, Martella caught herself leaning against the SCH.

"Illusion." Client waved upward.

"Yes." She jerked back and caught her breath.

"The house's data disclosure says the owner was an interactive systems designer. When he died, a sister inherited the estate. When she couldn't sell it, she just let the property go." Martella heard herself chattering, stared at the marble floor, and tried to regain her balance.

"Here." An armored hand cupped her elbow.

She let him lead her across the vestibule toward double wooden doors. On the doors' carved faces, mountains towered above a valley filled with deer that strolled and shifted as they grazed. The doors opened, and she and Client faced a blank wall.

Martella froze. Client hesitated, then reached forward.

The wall evaporated, and sunlight flooded through a westward-facing bank of windows into a sitting room that took Martella's breath away again. The room's green carpeting shimmered like moss, and its dark wood furniture sat as if rooted in place. She collapsed onto a brown velvet couch and sighed as the back molded to her spine.

"It's lovely." She meant that for once ... was

beyond trying to sell this house.

Client stood beside the couch. "You're very brave."

"Am I?" She closed her eyes, holding back tears and bitterness. "I do what I have to." Which was not something to say to any client.

"Why did you agree to show this property to me?"

She flinched. "My boss said ..." She opened her eyes and stared at her reflection in the SCH's faceplate. "He said I was a natural for handling you." She swallowed. "My husband was one of the first SCHs discharged under the Hart's Rights Amendment. We talked. He made me leave the room. Then he opened his hide."

Her voice didn't shake at all. Familiar numbness took hold. There were no tears. As it was designed to do, in order to prevent its occupant's escape, David's SCH had exploded the instant it was violated by exterior atmosphere. He had known it would.

The Civil Rights Act of 90-97-9 had won all soldiers the freedom to leave the military and return to civilian life. But those who had fought within Self-Contained Habitat units suffered varying mental aberrations from the induced rages that allowed them to kill without quarter during battle. Naturally, no one wanted a crazed murderer living next door, pretending to be an innocent veteran. So in order to keep the maimed veterans, who were integrated into the SCHs, readily identifiable, the War Services Department fitted the released SCH units with Judgment Controllers. Any veteran was free — as required by the Civil Rights Act — to open his or her hide; but if they did, even if their physical disabilities didn't kill them, the SCH would. SCHs were mobile prison cells, and whatever Client was — whether a pieced-together conglomerate of man and machine or a whole human capable of rehabilitation — opening his hide meant bloody death.

So why a home like this? Why anything? That was David's reasoning. Why burden Annie with his curse?

"Let's go on." Martella stuck another piece of skintight back together. "I've wasted enough of your time."

"More like I've wasted yours."

The bastard. He didn't intend to buy anything.

They wound back through the entry vestibule, then up the broad staircase to the mansion's second level. Peeking through a doorway, they saw bloated orange cushion chairs crowded together about a chess board. In the next room, three black chairs, their hard narrow backs high and spidery, faced outward from the corners of an otherwise empty triangular space.

Another door opened into a room that held an ancient pump organ and stringed instruments.

Five cellos leaned against one wall. Six violins dangled above them. The violins were painted-on frowns. The cellos laughed at the violins. Three guitars stood on stands and leered at the cellos. Client touched an armored finger to the organ's keys. The instrument moaned, and Martella's skin prickled.

"Why do you want to see this house?" The question exploded from her like a hunted hare's mistake.

"It is special." Client tapped the cello, and its grin vanished into a sleek clean soundboard. "It's all about illusion here." He tapped the cello again, and its face reappeared.

Martella put a hand to her mouth.

Client said, "The illusion applied now is that this house doesn't want to be intruded upon. That's why no one has sold it." Client sat on the organ bench. "No one has figured out that they need to turn off the burglar alarm. You see, Professor Hiram Thaddeus Brax built this house." The SCH's helm tilted upward. "It has taken me three years to hunt it down."

Did that mean he wanted to buy it?

Client laughed, and the sound was as unnerving as it issued from his blank faceplate as the guitars' leers.

"I thought," he said, "that it would be horrible somehow ... not just ... childish." He waved at the frowning violins.

"I find it horrifying." She shivered. "Do you see something I don't?"

"I suppose so. Whatever nasty traps the professor left, they can't hurt me in here." Client thumped his chest. "But I thought Professor Brax would be alive, reachable, hurtable." He laughed again and his voice broke. "Sorry." The SCH helm shook. "I didn't mean to buy this house. I meant to tear it down. Now isn't that childish?"

"So you aren't buying?"

"Maybe."

The bastard was jiggling her like a fish on a hook. Her neck throbbed. Her hips were bruised and scraped from her near rape. She glared at Client. She deserved answers.

"Why," she said, "would you want to buy this? Or why would you want to destroy it?"

"You can't live in an SCH and remain sane."

She and David knew that.

"But, you see" — Client turned away from the organ — "insane people are difficult to control. So the military commissioned Professor Brax to create an illusion system that allowed an SCH occupant's control of his or her own will to be suspended."

Minus Brax's name, Martella had heard this before. She didn't want to hear it now — not David's words all over again, spoken in the same timbre and tone — from this creature. But she,

like a fool, had asked, though she was sick of SCHs and the politics of their rescue from the military's clutches.

"In here" — Client tapped his chest armor — "you float off into one world or another, dig a garden, play a game, climb a mountain. That's what you think you're doing. Instead, you're mounting troop carriers and killing people." His breath caught. "So, am I guilty of murder, or is Professor Brax?"

"I'm sure the dead don't care."

He snorted. She tensed, expecting a blow, something. David had hit her in his own way, and this was David here again ... or it might as well be. She had heard the explosion and opened the door to David's room. David, you ass. He could have warned her.

"Let's see the rest." Client extended a hand toward the room's doorway, and she led onward, beaten at this game.

They entered a large gymnasium. Client sprang onto a set of hanging rings, swung the length of the room, then dropped back down at her feet.

"I like that." The SCH's helm nodded.

She turned away, numb.

The house's main hallway wound onward, but the passage narrowed. Its ceiling dropped, and the floor began to ripple. She must be insane herself to be here with this ghost-of-her-husband thing. What would Annie do without her? She looked back and saw Client stooping and scrunching as the ceiling continued to lower. The house was as mad as either of them.

"May we go back? I ..."

At her words, the walls, ceiling, and floor vanished.

Her lungs emptied.

"Steady." Client cupped her elbow. "Look."

Her breath escaped in a rush. They had stepped onto a balcony. Overhead, painted clouds and flying birds decorated a pale blue ceiling where crystal chandeliers shone like miniature suns. Dizzied, she looked away. Below, a blue marble floor lapped the room's pale walls like an ocean kissing a sandy beach.

"A ballroom? She had never seen anything so magnificent. "It's ..."

Music swelled to life ... an old waltz, divinely sad. The ballroom floor blurred, and rotting corpses appeared, dancing while stench filled the air.

"This is genius." Client's fists thumped the balcony railing. "Offer one million mil even."

"What?" Backing, Martella swayed on her feet.

Client turned and raised his hand. It felt as if David's fingers brushed her cheek, and she fell against David's shoulder. A hard arm slid about her. A hand settled over the hollow of her spine.

She rested against the arm and looked up. Features shimmered within Client's faceplate, David's features ... only not David. She couldn't remember precisely how he had looked.

"I'm sorry," David/Client's voice said. "I'll take you back. You bargain for the house when you're up to it. I won't let anyone else sell to me."

She clung to Client, and his armor softened beneath her arms. She sobbed. A hand stroked her hair, and he swayed her to the rhythm of the corpses' waltz. She rode his gentle touch. Lips brushed her forehead ... her hallucination so real that she couldn't shake it off.

The waltz died. She clung trembling to the SCH and smelled plastic and tree sap. Blinking, she focused on a green smear across the SCH's armored biceps.

"Better?" Client eased back, supporting her.

She nodded. Below, the corpses still danced. How could she have hallucinated David amidst this?

"Did you say you want to buy the house?" She couldn't have heard him right. Maybe the ragged men outside had killed her and she had dreamed everything since.

Client stared down at her. "From you, I will buy this house, turn off its weirdness, and turn on welcoming faces."

"No!" The angry shout rose from behind her.

Startled, she whirled about. The mad-eyed old man she faced wore tattered clothes, and his hair stuck up in spikes.

"Get out!" The image shook as it shrieked. "This is my home. You can't take any more. It's my work! Give it back! You've no right killing people with it. Give it back!"

The image wailed and flew at her. Sparks trailed from its rags. She tried to run, but pain caught her and electric shock slammed through her.

"No!" It was Client.

Chill hard bands wrapped about her body, crushed her ...

The pain stopped.

"Mine!" The ghostly illusion sailed off the balcony and rose toward the ceiling. "Mine!"

Colliding with a chandelier, the specter exploded into popping sparks and electrical arcs, and the waltz's sad strains died. In the music's wake, the air smelled of mustiness and abandonment.

Martella shook so hard that she bruised her chin against Client's hide. His great gloved hand cupped the back of her head, and he held her until she steadied. How, she wondered, could this house with its grinning cellos seem so terrifying, yet this monster in battle armor comfort her with a touch?

"It's all right," Client said in her ear. "I suppose the Professor went mad in the end. I did, too, thinking that I could cure anything by killing

him."

"Don't buy this house. Nothing's real here."

"I'm sure" — He stole her words — "that the dead don't care. I want the house."

She waited for the spell to break. Oh, oh my. What was the commission on a million mil, minus Reality's share? David had said don't hesitate. Thank you, David, for the advice.

Martella commended Richard, her secretary. "Messages?"

"The Milton SCH can look at properties in the morning. I scheduled it..."

"Her," Martella corrected. "You scheduled her." She kept her special clientele by treating them with respect.

"The Coburn brothers have decided to list with us. I took their application. Jon called from Reality. I let the messenger handle him. The Tiage title record is on your desk. And ... someone named Aegean left a message code, said it was personal."

Martella stared out the window of her home. Annie was playing in the garden, her hair ashimmer with sunlight. Thank you, David, for Annie.

"Martella?"

"I know I shouldn't contact you." His voice shivered her spine. "Is it about the house?" She tried to sound distant.

"No. It's about us."

"You have no right."

"I know, but I want to show you a trick the house has taught me."

A shimmer started inside her telecomm screen and bled from the screen into the air beside her.

She took a step back. A man materialized before her. The comm screen cleared and showed Aegean's SCH again.

Martella reached out and touched the tall man-image beside her. Its arm felt like warm flesh. She swallowed. "Is it you?"

The image said, "I'm Aegean. This is how I remember myself. But your hand is softer than I remember."

Could he truly feel her touch? She leaned forward and kissed his cheek, and the man-image smiled a frightened, grateful smile.

"Welcome to my home," she said. Thank you, David ...

"I can look like your husband if you like."

She considered it. "No. Be yourself and visit often."

Aegean held her hand. She stretched up for his kiss and cared not at all that they stepped beyond reality's real estate. □

A Wheel in a Wheel

By Debbie Stitt Baker

Art by Beryl Bush

The mysterious golden orb hovered two feet above the tip of the Washington Monument: silent, awesome, foreboding. Undetected by radar, it had seemingly appeared from nowhere, suddenly filling the sky with its odd presence. NASA reported that it was exactly 55 feet in diameter, about the distance of one side of the monument at its base, and perfectly spherical. The President said no one knew where it had come from, but people knew deep down no man-made object could hover so long, so silently. The orb had a universal effect on the human psyche: it stripped away the veneer, the familiar, the comfortable security blanket of normal everyday life, and left all that knew of its presence feeling vulnerable and afraid. No one knew how or why it had come, or what power lay beneath its golden metallic surface. The feeling shared by all was that it didn't belong in our peaceful blue Earth sky, and they wanted it gone.

That was, until the miracles began.

The time was about two weeks after the orb had appeared. The medium was the top-rated American daytime talk show. The show was the modern equivalent of an old-time Christian revival, where people rise from wheelchairs and declare God has performed a miracle. Only on this show, they came, young and old, on stage and told quiet tales of how the orb had changed their lives. An elderly man claimed he had won the lottery because the orb had told him to buy a ticket. Another man said his wife was cured of inoperable liver cancer. An eight-year-old girl with waist-length frizzy red hair and big aqua eyes told of her alcoholic mother checking into a rehabilitation center. And so on.

It was staged. Robert Butler knew it was staged, and couldn't understand why everyone else couldn't see it, too. He was annoyed when within a few days, every talk show, television newsmagazine, and news program began copying the format, bringing forth more and more testimonials. But he was shocked and dismayed when his wife Peggy started talking about the orb in the same starry-eyed fashion. She was usually so level-headed and sensible.

It was a peaceful October Saturday afternoon in Bakersfield, Texas, and Robert was stretched out on the couch reading a book on microwave repair. His fourteen-year-old son David was at the gym playing basketball with friends. Peggy had

fixed him a plate of low-fat nachos earlier and returned to the living room to pick up the empty plate when she suddenly brought up the subject. She stood at the kitchen door with a dish towel draped over her shoulder and said, "You know, what they say about the orb is true."

Robert pulled off his reading glasses and eyed her with disbelief. She was five feet seven and had a slim build, thick blond shoulder-length hair, and a narrow face. Her preppy glasses and faded jeans made her look younger than her forty-two years. She appeared to be the same woman to whom he had been married for the past nineteen years, but he was no longer sure.

"What?" he said, sounding simultaneously shocked and cynical. "Just last week you said the orb was dangerous and hostile. You said they should blast it from the sky before it killed us all."

"I didn't understand its power then."

"Its power?"

"The changes it's made in my life," Peggy said. "I'm in a long line at the grocery store and a checker opens up. I spend less time at stop lights. I go to the mall and find exactly what I'm looking for without having to walk for hours. And yesterday Larry encouraged me to apply for the Assistant Manager position that just opened up."

"But how can you believe that the orb is somehow responsible for these completely unrelated events?"

She opened her mouth to speak and then hesitated, searching for the right words. "It's hard to describe, but I can feel the orb's presence. I know it's watching out for me." She smiled and said, "I know this doesn't sound very scientific, but I feel lucky. Charmed. Like that character in David's Nintendo game that is surrounded by stars and can't be hurt."

"Peg, don't be stupid. The orb's nothing more than an inanimate piece of metal. It doesn't even know you exist, let alone care about your parking problems and trips to the mall."

"Well," she said shortly. "Just because you disagree is no reason to be rude."

He put on his glasses and picked up his book.

Her anger wouldn't let the subject drop. "Still the rebel, aren't you?" she said. "It's no wonder you don't believe in the orb. You've lost the ability to believe in anything these days."



Robert lowered the book and met her angry gaze. Their eyes locked, and in that brief moment each knew exactly what the other was thinking. Nineteen years of marriage had finely tuned their non-verbal communication skills.

Peggy broke the gaze first and shuffled off quietly to the kitchen.

She had, of course, been referring to his disbelief in God, the topic of their rare but heated arguments. He didn't understand why his renunciation of religion several years ago still bothered her so much. But the rebel comment made him feel a bit proud. When he and Peggy had met in college, they had both been liberal rebel types, and he would like to think he hadn't changed all that much. He turned his thoughts back to his book and would have forgotten the incident, if not for Peggy's continued iciness during dinner and through the next week.

The following Friday, the news media reported that the orb failed to register on the most sophisticated sensor equipment in the world, and that the President was considering taking bolder measures.

That evening, Robert found Peggy stretched out on the guest-room bed, watching the old Sony that had been in their bedroom for nearly ten years. Beside her, the three-inch headline of an open newspaper boomed the words, "MILITARY TO BLAST IT OPEN." A box of clothes sat next to the closet door.

"What's going on?" Robert asked from the doorway.

"What's it look like?" Peggy said, without looking up. Her voice was husky, as if she had been crying.

"Like you've moved out of our bedroom."

"That's right."

"But why?"

She didn't reply.

He came over and sat gingerly on the edge of the bed. "Peg, please, I don't want to fight with you."

She let out a short, sarcastic laugh. "Fighting with you is impossible. You're always right."

He sighed; they had had this argument before. "If I've offended you, I'm truly sorry. Can't we forget all this and move on?"

Peggy drew her knees up and hugged them. "No," she said. "Not this time."

Robert rubbed his bald head. He knew he wouldn't be able to change her mind, not while she was in this mood.

He went downstairs and warmed up the tuna casserole. How could she do this? She had put their entire marriage on the line over a trivial disagreement about the orb. After all, he had done nothing wrong. Truth had been his only crime.

He stabbed his fork into the gloppy mass of noodles. Bolstered by indignation, he pictured confronting her with these simple truths, demanding that she answer them or move back into their bedroom. She would stammer, then blush, and finally give into his impeccable logic.

He believed now, as he had not before, that the orb held a tremendous power over her — even if it was only in her mind. *Isn't that the definition of God?* his internal voice whispered. *An all-powerful being?* He smiled at the irony as he carried his empty plate to the sink.

He vowed that as soon as the orb left, he would make Peggy understand how unfair she had been. His family was more important to him than anything. After the orb left, he would make things right again. The orb couldn't hover in the Earth sky indefinitely, without food or fuel. Once it was gone, everything would return to normal.

If only the thing would leave.

The Air Force tried to cut into the orb with the hardest substance known to man. The specially made diamond drill bit shattered. The acetylene torch had no effect either, not even marring the orb's perfect golden surface. A few days later, the man who had hung from the helicopter drop and operated the equipment appeared on a late-night talk show and spoke of how the orb had changed his life. Because of the publicity he had received, he was reunited with the brother from whom he had been separated at the age of five.

Then they tried to capture the orb using a giant net. No one knew what they would do with it once they got it down, considering that no earthly tools could open it. But they tried to capture it, anyway. It was quite a spectacle. Eight helicopters slipped the net under the orb and tried to lift it. The orb didn't budge.

Peggy stayed home from work, as did millions of other Americans, to watch the events on TV. Hundreds of thousands marched on Washington and cheered the orb. The orb's victory over the military elevated its status in the eyes of its growing numbers of believers.

The evening of the net fiasco, after listening all day long to his coworkers talk about the event, Robert drove straight to the health club. He worked as a fix-it-all in an electronics store called Mack's TV, named after the owner and his longtime friend, Mack Johnson. Robert liked his job, but today the place had gotten on his nerves.

The health club building had formerly been a bowling alley, with aluminum walls and high, rounded ceilings. In the fall and winter months the place was always chilly. Robert shivered as he changed into a T-shirt and sweats and tucked his work clothes in the locker. He scoped out the room

to be sure he was alone before checking his reflection in the floor-length mirror. People said he looked like Ed Harris, but except for the square jaw and bald head, he couldn't see the resemblance. He lifted his shirt, admiring his firm stomach. His hair was almost gone, but at least his body was still in shape.

He had been on the Stair Master for twenty-five minutes when Mack walked in. Robert moaned inwardly as his friend approached, still feeling irritable and out of sorts and wanting very much to be alone.

"So what do you think about the orb, now that they couldn't get it down?" Mack said, climbing onto the treadmill next to Robert. "You still think it's from outer space?"

"Of course it is," Robert said with a half smile, dabbing his damp forehead with an end of the towel draped around his neck. "But I'm sick of all this media hype. Why should we care what it is or where it's from, as long as it doesn't blow up anything or hurt anyone? Let it be, I say. If the orb had come here to hurt us, it would have done so by now."

"You can't blame the president for trying to get it down," Mack said in his usual fair-minded, Libra-like manner. "After all, it doesn't make sense the thing would be there for no reason at all. It's got a purpose, all right."

"Well, at least you don't buy into all that garbage about miracles."

Mack didn't answer right away, and Robert shot him a sideways glance. Mack was tall and slim, with balding gray hair and a long nose crooked at the midpoint. His skin had the splotchiness of a man over sixty who had spent too many years in the sun. Robert got the distinct impression that he felt uncomfortable.

"Well, maybe I do, at that," Mack finally said quietly. "All of us could do with a few miracles."

He was astounded by Mack's sudden change of opinion. Just last week over lunch, Mack had ridiculed an editorial suggesting the orb could perform miracles. Now he had completely flipped on the issue.

Mack stared out at nothing in particular and took on a dreamy look. "It's odd, but I do feel different. I guess I'd have to say I feel lucky. Like the

orb is protecting me somehow."

"How could the orb protect anyone?" Robert asked. "It's only a piece of metal. It doesn't care what we do."

"You know, you're the first person I've talked to who doesn't feel its power."

After a long silence, the conversation turned briefly to shop talk, and then Robert switched to the weight machine. When he had finished his usual repetitions, he continued until the dark wet circles on his gray T-shirt had grown to the size of melons.

He wiped his face and looked around for Mack, but he had already left.

That was odd, him leaving so early. Usually Mack waited for him at the juice bar.



The following week, a small plane flew into

restricted air space, and a man parachuted down, landing squarely atop the orb. It took the police six and one-half hours to get him down. Throngs of people gathered to watch, cheering the man's efforts.

The event was covered live on all major TV channels, preempting prime-time shows. Peggy and David stretched out on the living room floor as they watched, a bowl of popcorn between them, laughing and joking as if they were sister and brother instead of mother and son. Robert read a book in his chair, glancing up at them from time to time and feeling left out. He had missed Peggy these past two weeks, more than he thought was possible.

Suddenly David twisted his head around and said, "Dad, do you believe in miracles?"

"No, son, I don't."

David looked disappointed. "That's what the guys said."

Robert frowned. "What, your friends at school? How would they know what I do or don't believe?"

David turned back toward the TV. "We were just talking about the orb, that's all."

"You talk about the orb with your friends?"

"Sure, we all believe in it."

"You believe in it?"

"Sure. Even the Bible predicted it would come."

Peggy clasped her hands to her breast and quoted with a dreamy-eyed fanaticism, "*Behold, he cometh with clouds; and every eye shall see*

him."

Robert was stunned. Despite her religious tendencies, in all the time he had known Peggy she had never once quoted the Bible. He opened his mouth to point out that the biblical reference was sufficiently vague to allow a multitude of interpretations, but Peggy interrupted. "David, would you run to the kitchen and get me another soda?"

Once David was out of earshot, she said heatedly, her voice shaking with anger, "Don't try to force your disbelief on him. He has the right to believe in the orb if that's what he chooses to do."

Robert had never seen her quite this angry before, and it surprised him. "Of course you're right, Peg," he said in a conciliatory tone. "David has the right to his own beliefs. But doesn't that also apply to me? Don't I have the right to express my opinions?"

"I wish you wouldn't. I wish you wouldn't be so difficult."

He gazed at her, feeling as if she were a stranger. "Me, difficult?" he said lightly. "It's you who moved out of our bedroom for no reason."

David returned with the soda, and Peggy turned her attention back to the TV. Robert stared at them glumly, wondering with frightened amazement what was happening to his wife and once-happy marriage.

At first, Robert thought it was his imagination, or just coincidence. But going on the third week, he had to admit that something odd was happening with his friends at work.

Robert's office was located in the back of the warehouse, a large, makeshift cubicle put together of various-sized partitions bought at a government auction. The store had a tiny break room up front with just enough space for a soda machine and a small table, but it was rarely used. During breaks, the employees preferred to stretch out on the old leather sofa in Robert's office, making small talk with him as he tinkered with some device in need of repair.

But now they no longer came. One day Robert made a point to visit the break room around tenthirty and found two clerks huddled at the table, speaking in low voices. They ignored him as he bought a soda.

Then Mack stopped going to lunch with him. They used to meet at the diner at noon almost every day, but suddenly Mack stopped showing up. One morning, when Mack dropped off some invoices for signature, Robert said lightly, "Hey, Mack, what's going on around here? Everyone's acting so strange."

Mack dropped his gaze. "It's nothing, really."

Robert didn't reply, creating an awkward silence.

Mack shifted his feet uncomfortably. "The orb's given us so much, changed our lives. Everyone says you'll jinx our luck, since you don't believe."

The truth struck a nerve, and defiance overcame him. "Tell me, Mack, what exactly has the orb done for you? How has it changed your life? From here, your life looks precisely the same."

Mack gave him a cold, penetrating stare. Robert had seen that look often enough lately on his wife's face. "It's true, then," Mack said. "You still don't believe."

Before Robert could reply, Mack went lumbering off in the direction of the front door.

Robert rubbed his bald head and stared absently at the partially disassembled VCR on his desk, his heart pounding. Why had he done that? Would he ever learn to keep his mouth shut? He had only made matters worse.

You'll jinx our luck.

His coworkers thought he was a *jinx*? He suddenly felt as if everybody was talking about him behind his back. He remembered the comment David had made the other night about his friends at school. What was it exactly? *Dad, do you believe in miracles? ... That's what the guys said.* True, he had been outspoken about the orb at work and at home, but how would David's friends know that?

Robert suddenly felt cold, and he slipped on the old plaid flannel shirt hanging on the back of his chair before heading out to lunch alone.

Over the holidays, Peggy took David to her mother's house in Kansas. Robert hated the Kansas winters and usually complained about going, but this year he would have liked to have been invited.

David called on Christmas Eve, but Peggy wouldn't take the phone when it was offered. "She's busy, dear," his mother-in-law said, her voice full of concern.

On Christmas Day, Robert couldn't concentrate on the paper, or on the *Home Mechanics* magazine he tried to read. The house was too quiet, and he missed Peggy terribly. He picked up the remote, flipped on the TV, and began to scan the channels.

He was shocked by what he saw.

There were, of course, the infomercials and the home shopping networks and the cartoons. But the four major networks and several minor stations were carrying a religious program in which an evangelist was preaching a sermon — live from the base of the Washington Monument.

The evangelist spoke in grand words about the orb, and how it marked the second coming of God and the beginning of the reign of Christ, and then a choir broke into song.

Ezekiel saw that wheel
Way up in the middle of the air
Ezekiel saw that wheel
Way up in the middle of the air
The big wheel run by faith
And the little wheel run by the grace of God
A wheel in a wheel
Way up in the middle of the air

"Why, now they're saying that the orb is God!"

Robert said with disgust. He flicked off the TV with the remote and sat in silence, outraged and frustrated by the events of the past weeks. In a short time, the entire world had gone completely mad. He could be the only sane person left on Earth.

The Sunday after his family returned from Kansas, Robert awoke around nine to a quiet house. In happier times he would have been greeted by the smell of coffee, and Peggy in the living room reading the paper, but today all the lights were off downstairs and the coffee pot was cold. He shuffled about the kitchen getting the coffee started, agonizing over how many scoops to use and finally deciding on three, munching on chocolate chip cookies while he watched the coffee drip into the pot.

A mug of weak coffee in hand, Robert peered out the front window for the paper. Of course it was at the end of the driveway. Robert headed back upstairs to get his robe, peeking into David's room along the way, expecting to find him asleep. Instead he found a crisply made bed.

Robert grumbled to himself, irritated that Peggy would take David somewhere without telling him where they had gone. She would never have done that before the orb had invaded their lives.

As he passed the guest room, a golden glint caught his eye. The door was only partly open and the light was off, but the morning sun shone through the window, illuminating a tall item on the dresser.

He gently pushed the door open with his free hand and approached the item.

It was a statue of the orb, about thirty inches high, but not an exact likeness. The base was clearly the Washington Monument, but the object at its tip was larger in proportion than the orb was to the obelisk, and its shape was wrong.

The object at the tip of the statue was a giant golden eye.

Engraved in brass at the base of the statue were the words:

*Annuet coeptis
Novus ordo seclorum*

These Latin expressions were vaguely familiar to him, but at first he couldn't quite place the source. On a hunch, he went into his room, fumbled through his wallet for a dollar bill, and returned to the statue.

To the left of the words "In God We Trust" on the dollar bill's backside was a picture of a pyramid topped by a gleaming eye. He glanced back and forth from the picture to the statue several times. It was obviously the inspiration for the statue's giant eye. And the Latin expressions at the base of the statue were printed around the pyramid on the dollar bill.

He headed downstairs and pulled the dictionary from the bookcase, placing his coffee mug on the end table. "*Annuet coeptis*," he repeated several times until he found the entry, and then read it aloud. "God has favored our undertakings." He flipped through to the entry for *novus ordo seclorum*. "A new order of the ages is born."

A new order is born? He sat down and rubbed his forehead, frightened that so much was happening beyond his understanding and control. One thing was certain, his wife was deeper into this orb business than he had realized.

In fact, that evening Peggy marched into his bedroom and announced that she wanted a divorce.

Seemingly overnight, statues of the orb popped up everywhere. Robert's coworkers scattered them on cash registers and counters; the diner placed six-inch versions atop the napkin holders; tiny scented statues dangled from car mirrors; teenagers wore the trinket size around their necks on black cords. The local Wal-Mart manager said he was bringing the statues in by truckloads, and they were walking out of the store faster than the orb could perform miracles.

It irritated Robert when his son came home one evening wearing one on a black cord, and after Peggy had gone up to bed, he brought up the subject.

"I see you still believe in the orb," Robert said casually.

David shrugged.

Robert sighed. Getting information from a teenager was never easy. "Is that a 'yes'?"

David picked up the *Home Mechanics* magazine on the coffee table and began to leaf through it. "Tim's older brother says it's stupid not to believe in it."

"Why's that?"

"He says the worst that can happen is you believe in the orb and it's not God. No harm done. But if you don't believe in it, and it is God, you're in big trouble."

"But a person's beliefs are very important.

They're not something you should have because someone tells you should have them. Your beliefs define who you are."

David blushed. "You changed your beliefs when you stopped believing in God. Did that change who you were?"

Robert was surprised by this question and the wisdom behind it, so much so that at first he couldn't think of an appropriate reply. In the meantime, David tossed the magazine back onto the coffee table and went up to bed.

David has a point, he thought. Beliefs do change over time. It's more important how you live than what you believe.

He grinned. David was a pretty smart kid, even if he was a teenager.

On a Sunday evening, seventeen weeks and three days after it had appeared, the orb suddenly sped from the Earth sky. Cameras captured its departure on videotape, but it was dusk, and the orb moved with such great speed there wasn't much to see. The President held a press conference to announce its departure and to express words of comfort to the American people.

Robert's heart leapt with joy. Finally, he could have his family back. Finally, his life would return to normal.

Now that the orb was gone he would get Peggy back, he would make it happen. As soon as the time was right.

He knew he would have to give Peggy time to get over her loss, and of course he would have the good taste not to express his joy to anyone around him. He waited patiently through two long weeks before making his move.

He awoke that Saturday morning to the sun streaming across his bed. He knew it was the day; he could feel it. Over coffee, Peggy was civil to him, engaging in a long conversation about one of David's friends, confirming his belief that the time was finally right.

Early that afternoon, he snuck out of the house and returned with two dozen red roses, smuggling them upstairs to his bedroom and then lying down for a short nap. He awoke at four-fifteen. He took a quick shower, made reservations at the steak house, and whistled a tune as he slipped on his best suit and tie. Wanting to surprise her, he carried the roses behind his back and tip-toed downstairs.

A low hum of voices emerged from the living room. As he distinguished the door, he could distinguish the words.

Blessed be the orb, for the orb is good.

The roses hit the floor with a soft rustling thump.

Peggy and David were kneeling before a shrine

in a corner of the room, praying to a five-foot-tall statue of the orb.

He gazed at them from the cool dark hallway, his mind bringing home the truth with sudden force. During these past few weeks, he had witnessed the birth of a religion. Thousands of years from today, people would continue to worship the orb, awaiting its return.

He leaned weakly against the door frame and squeezed his bald head between his palms, overwhelmed by a feeling of defeat. He had spent the past fifteen weeks alienated from his friends and family, believing that his life would return to normal once the orb was gone. Now he realized nothing would be the same again. The orb's mysterious disappearance had only served to enhance its appeal.

He could not go on this way, fighting everyone he cared about. Something had to give. At forty-two, he would not divorce his wife and start over alone.

Without Peggy, he had no life.

A sacrifice had to be made.

Suddenly, David's words came to mind. *The worst that can happen is you believe in the orb, and it isn't God. No harm done.*

He cleared his throat and approached his family.

At first Peggy cast him a reproachful look, but as Robert knelt before the statue of the orb and began to pray, she threw her arms around his neck and wept with joy. □

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Requiescat in Pace

By Anthony R. Lewis

Art by Larry Blamire

It was after a particularly satisfying session of love-making that Brenda discovered her husband Charles was dead. She heard no heartbeat when she laid her head upon his chest. Nor did his chest move with breathing. She pointed a finger at her reflection in the bathroom mirror. "Tomorrow, you are going to see Dr. Arnstein and find out exactly what has happened to Charles."

She returned to bed. "Good night, Chuck."
"Good night, love."

"The doctor will see you now, Ms. Ogden." The nurse ushered her into the office. She walked across the Karastan rug to the doctor's marble-topped desk. The polished redwood walls glowed in the late afternoon sun that warmed the room through the crystal skylight. The doctor opened a folder (no computers for this professional), uncapped his fountain pen, and spoke: "What seems to be the problem?"

"My husband is dead," she blurted, forgetting her carefully planned speech.

Looking in her folder: "That would be Charles Ogden." He opened a second folder. "Hmm, yes. Entered the thanatic program on February 12th ..." The finger went down the page. "Yes, yes, very good progress." He looked at Brenda. "But what is the problem, Ms. Ogden?"

She stared. "I told you, my husband is dead."

"Well, if he wasn't, I would be seriously concerned about him. However, I am pleased to tell you that your husband is fine."

"Fine? My husband is dead and he's fine?"

"Of course, of course. But the specific problems?" He took a sheet of paper and wrote "Charles Ogden: possible post-thanatic trauma" on the top line. Below that, one inch in from the left-hand margin, he put the numeral 1. "Does your husband work regularly?"

"Well, yes, but ..."

"And no complaints from his supervisors?"

"He hasn't said anything."

"And is he able to perform his spousal responsibilities?"

She thought a moment. "Well, yes. Maybe bet-

ter than usual," and she blushed.

The doctor halted his writing. "Better? Interesting (may be a paper there). In what way?" The numbers continued.

"He seems to be more thoughtful, more concerned about me, rather than himself ..."

"I don't see that you have any problems, Ms. Ogden. From what you tell me, you're a very lucky woman." He closed the folders, clasped his hands, and smiled at her. "Just be sure to keep your husband on his salt-free vegetarian diet," he admonished her.

Wheels in Brenda's mind spun, then something clicked. "You turned my husband into a zombie!"

"Ms. Ogden." The doctor was shocked. "That is an uncalled-for insult. The proper term is post-thanatic personality."

"How could you do such a thing?"

"It's actually quite a simple procedure — regular treatment with Samedine in conjunction with hypnotic therapy ..."

"But ..."

"Don't worry. It's fully covered under your husband's medical insurance. The insurance companies are quite willing to pay for it. Just imagine, Charles will never be sick again, nor need medical treatment, nor surgery." He rummaged in his desk drawer. "Here's a pamphlet. It will explain the program to you. Feel free to call me if you have any additional questions. Good day."

Good day."

Brenda left the office in a daze, arranged for payment, and was home before she looked at the pamphlet: *Living with the Post-Thanatic Personality*. She skimmed through the pages: "corporate wellness plan" ... "no smoking, no drugs, no illness" ... "lowered insurance premiums from lowered claims."

"Oh, yes," she thought, "the dead — sorry, the post-thanatics — don't get sick. Just collect the premiums and pay nothing out. A bonanza for the insurance companies." She would do something about it. She would talk to people. Someone would listen.

From Charles's employer: "Computer Exploitrionix is proud to be in the forefront of those corporations working hand in hand

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with the insurance industry to provide the finest medical treatments for American workers. It is only through such efforts that.... Our programming staff, of which your husband is a member, have volunteered to assist in testing..."

Programmers, she realized, would be the perfect starting place. Zombies had a bad smell and looked as if they were falling apart — but so did most programmers. It would be difficult for any non-medical person to know whether a programmer was pre- or post-thanatic. How long would a zombie last? Three years? four? Why would the company care; few programmers stayed at one job that long.

From the State Insurance Commission: "The subject referred to in your letter of 15 July is *ultra vires* insofar as this Commission is concerned. We are not chartered for these subjects. However, we do note that since this program has been introduced, the cost of insurance to employers in this state has decreased markedly, significantly improving the business climate. The Commissioners hope that you will recall this when you vote in November."

From the U. S. Food and Drug Administration: "Samedine has been approved for experimental use. Initial tests on miners, firewatchers, and lighthousekeepers have proven it to be effective in reducing chronic illnesses, as well as the normal minor complaints such as colds, influenzas, asthma, allergies ..."

From U. S. Senator S. McMillan Hereford: "... while I appreciate, and have sympathy for your personal concerns, you must realize that the increasing cost of health care is one of the major issues facing our nation today. No avenue can be left unexplored in the campaign to bring quality care to our people at an affordable cost. Therefore I am sorry that ..."

They were all the same. No one could or would help her. Practical assistance lacking, Brenda fell back upon the spiritual support of her childhood. The parish church of St. Francis was empty on a weekday afternoon as Brenda knelt in prayer. The atmosphere brought back pleasant memories of her childhood, but not the solace that the adult needed. Afterward, she sought the parish priest and told him all.

"You see, Father, my husband is dead."

"That may be true, Brenda, but death is the transition that all mortals eventually come to."

"But what of his soul?"

"There has been no ruling on this. I am inclined to believe that, since the act was done for the good



of others, it lies more toward martyrdom than toward suicide. Be sure that, when your husband is finally inanimate, he will have a proper Catholic funeral and be buried in consecrated ground."

"And the people who killed him? What of them?" She was bitter.

"My child, throughout history we see many instances of those whose lives were sacrificed for the good of the greater number. Some are as voluntary as the holy saints and martyrs. Others, like soldiers, may not have the choice — but it is still necessary. I hope you can see this."

She began to cry. "In a few years, Charles will be gone. There'll be nothing left of him. We were going to have children, but now it's too late."

The priest stared at her; his jaw dropped. "Holy Mother of God," he stammered, "birth control!" He picked up the telephone on his desk. "You'll have to go now, Brenda, but I think the Bishop may have something to say about this."

And so he did.

From the *Pilot*, newspaper of the Archdiocese of Boston: "The righteous wrath of the Church fell upon the unholy money-mad sinners of the insurance industry (editorial on page 5) ..."

From the *Boston Post*: "At the request of the Cardinal, Senator McHenry has opened an investigation into questionable practices in the health insurance industry. 'If these allegations are true,' the Senator told this reporter, 'then there may be grounds for criminal, as well as civil, charges to be brought. We will begin hearings immediately after the November elections.' The Senator is not up for re-election for two years. He dismissed talk of the presidency as premature."

From the *New York Sun*: "The reactionary leaders of the Roman Catholic church have put a halt to one of the most progressive plans to improve the nation's health system since vaccination was introduced. This action is consistent with their lack of concern for ..."

From *The Wall Street Journal*: "Insurance company stocks plummet on Church action (story on page A11)."

From the *Brooklyn Eagle*: "Bums World Champs: sweep series from Senators in Four."

Requiescat in Pace.



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